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WINTER COURSES.

Zoology, 9 a.m.—Professor Young, M.D.

Clinical Medicine, 9 a.m.—Professor McCall Anderson, M.D., and Professor Gairdner, M.D., LL.D.

Clinical Surgery, 9 a.m.—Professor George Buchanan, M.A., M.D., and Professor Sir George H. B. Macleod, M.D.

Chemistry, 10 a.m.; and Chemical Laboratory, 10 a.m. to 4 p.m.—Professor Ferguson, M.A., LL.D.

Anatomy: Senior, 11 a.m.; Junior, 2 p.m.; and Practical Anatomy, 9 a.m. to 4 p.m.—Professor Cleland, M.D., D.Sc., LL.D., F.R.S., assisted by J. Yule Mackay, M.D., and other Demonstrators.

Practice of Medicine, 11 a.m.—Professor Gairdner, M.D., LL.D.

Materia Medica, 12 noon, and Pharmaceutical Laboratory.—Professor Charteris, M.D., and A. Napier, M.D.

Institutes of Medicine, 12 noon, and Physiological Laboratory.—Professor M'Kendrick, M.D., LL.D., F.R.S., assisted by J. M'Gregor Robertson, M.A., M.B., and William Snodgrass, M.A., M.B., the Muirhead Demonstrator.

Surgery, 1 p.m.—Professor Sir George H. B. Macleod, M.D.

Midwifery, 2 p.m.—Professor Leishman, M.D.

SUMMER SESSION, 1889

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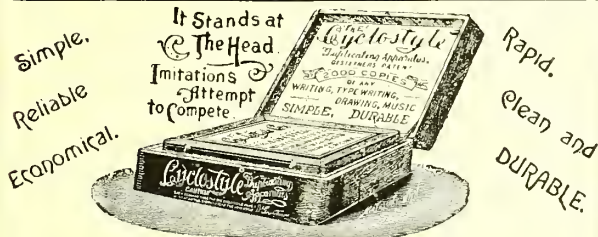
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Attfield's "Pharmaceutical Chemistry." Withering's "Botany," Watson's "Practice Medicine," Miller's "Surgery," Quain's "Anatomy," Ganot's "Physics," Squire's "Companion," Virtue's "Shakspeare Plates." 276 7.
"Chemistry Coal-tar Colours." 3s.; "Elements Materia Medica," with numerous woodcuts, by Bentley and Redwood; Taylor's "Jurisprudence," second edition, 2s. 6d.; Wilson's "Inorganic Chemistry," second edition, numerous woodcuts, 3s.; Bowman's "Practical Chemistry," fourth edition, numerous woodcuts, 2s.; Cassell's Latin-English and English-Latin Dictionary, 3s.; all post-free. A. Clements, Cootchill, Co. Cavan, Ireland.

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Reliable recipes, 6d. each; full set of 130, neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

One dozen first-class recipes for articles in daily demand, used in some of the leading English houses; sent post free for 2s. 6d. J. T. Webb, 77 Dover Street, Belfast.

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Two sets of oak frames with nested shelves, 59 each, 2 ft. 10 in. high, 1 ft. 10 in. broad, 6½ in. front to back; also one set mahogany ditto, with cupboard under, 4 ft. 2 in. high, 4 ft. 11 in. wide, 10 in. front to back, thirty-eight drawers; also three pill-machines. Wilkinson & Co., Fitzalan Square, Sheffield.

Dispensing screen, 7 ft. long, with handsome tablet in centre, nearly new, 5l. 10s.; 180 gold labelled shop rounds and jars, 9l. 10s.; 8 ft. ebonyised wall-ease, new, 7l. 10s.; 12-ft. range mahogany-fronted drawers, with crystal knobs and bevelled-glass labels, 10l.; 12 ft. range polished pine ditto, gold label ed, 6l. 10s.; 5-grain second-hand pill-machine, good, 12s. 6d.; mahogany case and desk, 2l. 15s.; polished pine ditto, 2l.; 4 4 gall. carboys, 10s. each; 6 6 gall. ditto, 12s. each; 2-gall., 5s. each; 3-gall., 7s. each; 1 6-gall. swan-neck ditto, on stand, 2l. 10s.; 24 3-lb. blue jars, labelled, 2s. each; 12 4-lb. ditto, 2s. 6d. each; 24 4-lb. best pink jars, gold-labelled, 4s. 6d. each; bent front tooth-brush case, 25s. R. Tomlinson & Sons, Bond Street, Birmingham.

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The Chemist and Druggist, March 17, 1888. 274/36. One-grain pill-machine. State price to Provost, Chemist, Huntingdon.

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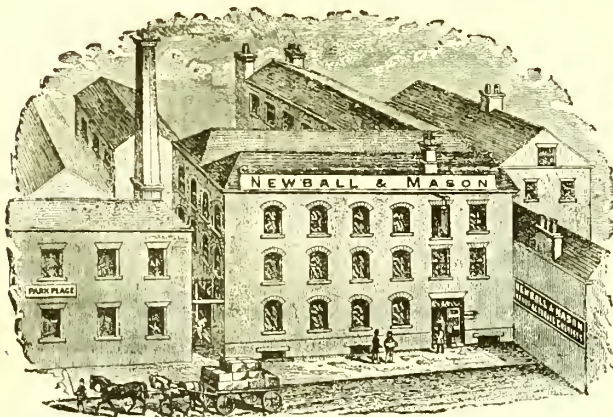
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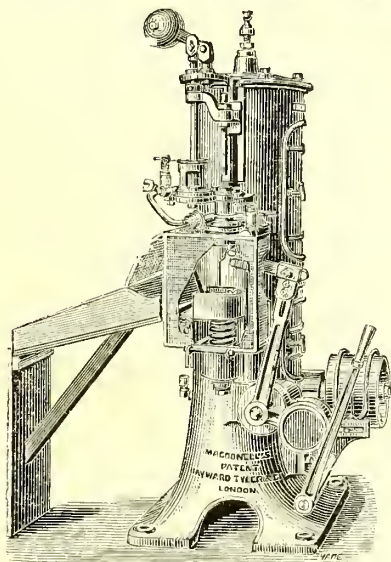
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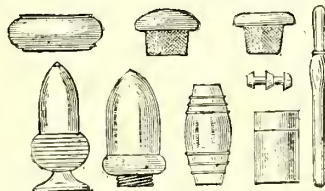


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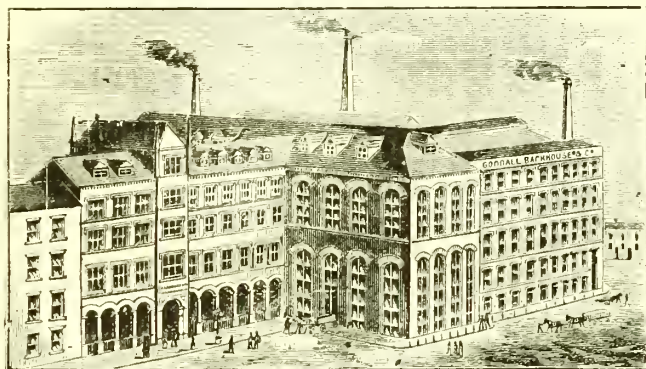
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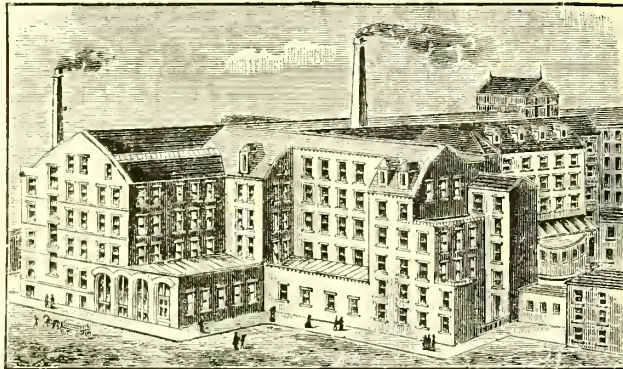
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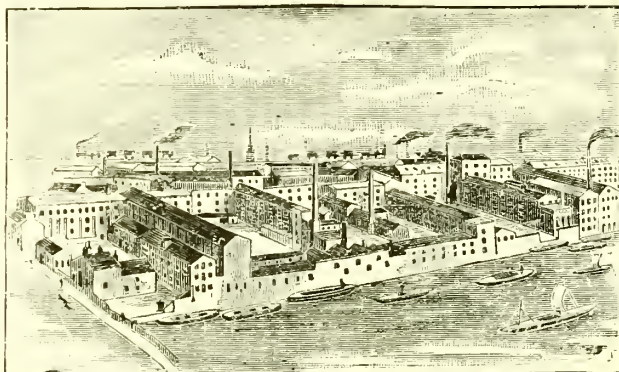
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SPECIAL MANUFACTURES—

Acetate of Amyl.

„ of Lead.

Acetic Ether.

Alcohol, Absolute.

Ammon. Bromid.

Barium Chloride.

„ Nitrate.

Citrate of Iron and Quinine.

„ of Potash.

Decoctions, Infusions, & Liquid

Extracts (concentrated in vacuo).

Ferri Iodid.

„ Sulph., Pure.

Lac Sulph.

Orange Quinine Wine, B.P.

Phosphate of Soda.

Phosphoric Acid.

Potass. Iodid.

Potass. Bromid.

Salts of Lemon.

Sodii Bromid.

Spt. Æther. Nit.

„ Ammon. Co.

Sulphur Præcip., B.P.

Syrup Rhæados.

Terebene.

Verdigris.

AND ALL PHARMACEUTICAL PREPARATIONS.

CITRATE OF MAGNESIA AND LEMON KALI.

HERB BEER EXTRACT AND COMPOSITION ESSENCE.

MAKERS OF ALL KINDS OF

PLAIN ROUND, SQUARE, AND OBLONG TINS.

PROPRIETORS AND SOLE MANUFACTURERS OF

GOODALL'S HOUSEHOLD SPECIALITIES,

KAYBERRY'S LUMBAGO PILLS,

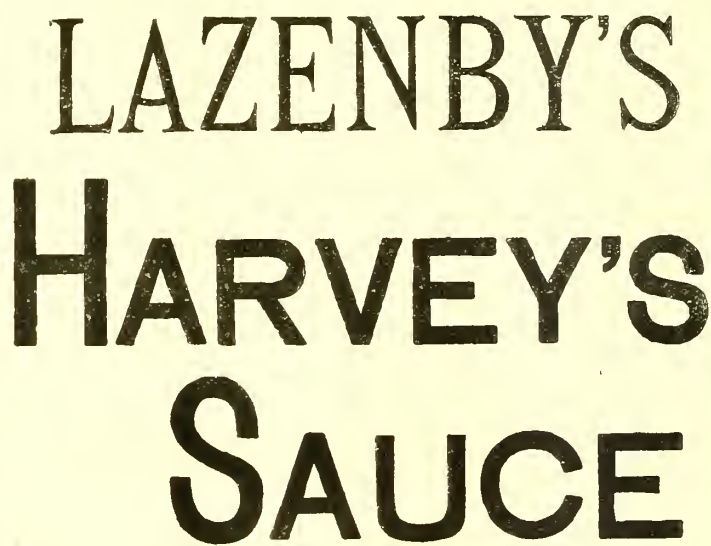
AND

FREEMAN'S SYRUP OF PHOSPHORUS.

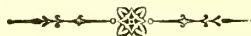
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GOODALL, BACKHOUSE & CO., LEEDS.

TELEGRAPHIC ADDRESS, "RELISH LEEDS."



In use for now nearly
a century.



Each bottle of the celebrated Sauce prepared from the ORIGINAL RECIPE bears the well-known Label signed "Elizabeth Lazenby," without which none can be genuine.



E. LAZENBY & SON,
18 Trinity Street,
LONDON. S.E.

BARRETTS **PATENT** **STOPPERS**

MIXED PICKLES
PREPARED BY
E. LAZENBY & SON
(9 EDWARDS STREET, PORTMAN SQUARE)
18 TRINITY STREET
LONDON. S.E.

HARVEY'S SAUCE. - CAUTION. - The admirers of this celebrated Sauce are particularly requested to observe that each bottle bears the well-known label signed "ELIZABETH LAZENBY"; this label is protected by perpetual injunction in Chancery of the 9th July 1853 and without it none can be genuine.

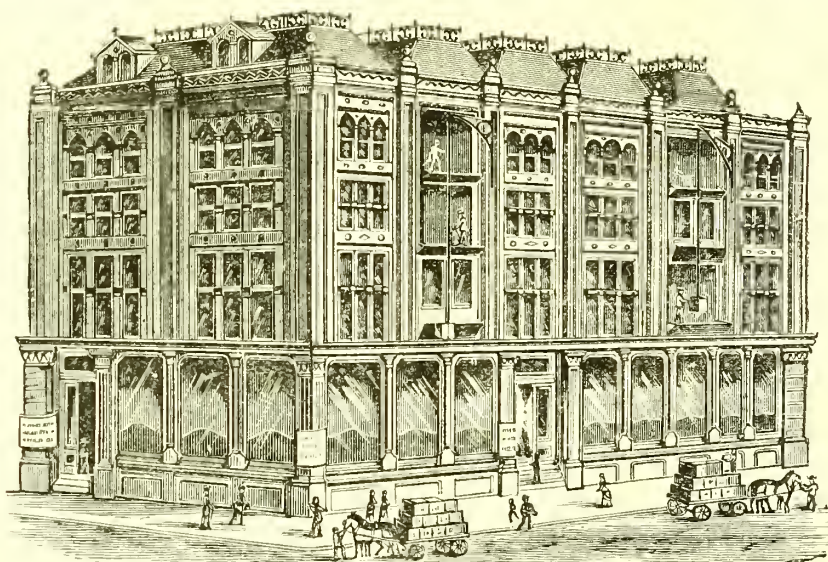
Elizabeth Lazenby

AGENTS FOR THE UNITED KINGDOM
E. LAZENBY & SON, LONDON.

HESELTINE'S

THE PREMIER TEA OF INDIA AND
CEYLON, IS THEIR SPECIAL IMPORTATION
AND THE PERFECTION OF TEA.

REGISTERED "TAPRABUNDA" TRADE MARK.



OFFICES AND DUTY PAID WAREHOUSES.

For Retail at 1s. 8d., 2s., and 2s. 6d.

In Lead Packets, $\frac{1}{4}$ lb., $\frac{1}{2}$ lb., and 1 lb.

Terms of Agency, and Samples of the Tea, on application.

WM. HESELTINE & SON,
56 Wilson Street, and 1 & 3 Earl Street, Finsbury,
LONDON, E.C.

AGENTS WANTED WHERE NOT ALREADY REPRESENTED.

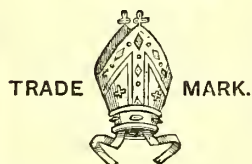
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MITRE TEA.

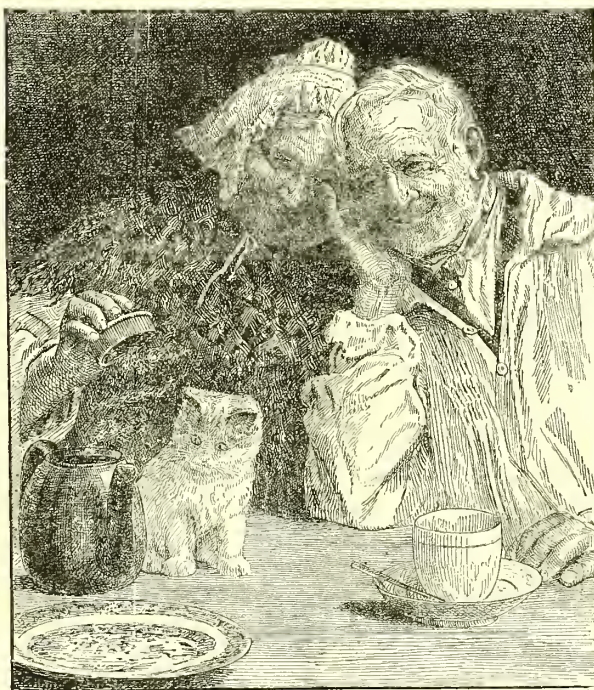
COMFORT & PROLONG YOUR EXISTENCE

BY DRINKING

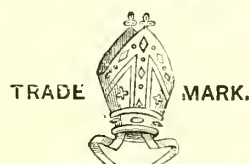
**MITRE
TEA.**



Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6



**MITRE
TEA.**



Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6

Fac-Simile of Show Card distributed Gratis to all Agents.

Sold by Specially Selected Agents. Wrapped in $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., & 1-lb. Parcels.

VALUABLE AGENCY.

Framed Show Cards, Enamelled Iron Tablets, Posters, Window Transfer, and Handbills with Agent's Name on supplied free. Newspaper and Railway Station Advertisements to suit the requirements of Agents. Applications for Agencies where unrepresented will receive prompt attention. Price Current and Pamphlet, with Terms, post free.

KEARLEY & TONGE, MITRE SQUARE,
ALD GATE, **LONDON, E.C.**

CHEMISTS' TEA AGENCY.**WALKER & DALRYMPLE'S**

BROKEN-LEAF TEA, 1s. 8d. per lb.

A MONEY SAVING TEA. ABSOLUTELY PURE.

The small leaf from some of the finest India and China Teas. Produces a Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S

INTERMEDIATE TEA, 2s. per lb.

BEST at the PRICE EVER SOLD. Great strength and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S TEAS.—

AGENTS APPOINTED, where unrepresented, throughout the United Kingdom.

Prospectus and Samples Free on Application.

Warehouses, 154, 155, 159 and 160 WHITECHAPEL ROAD, and

2, 4, 6, 8, 10, 11, and 12 BRADY STREET, LONDON.

P.O.O. payable at head office. Bankers, the National Provincial Bank of England.

A PURE CUP OF TEA
Is obtained in 3 mins. by means of
HOBBS' Patent Antitannic Infuser.
Better Flavour and Less Tea used than with the teapot.



READ OUR PAMPHLET. } GRATIS and POST FREE.
For Single Cups of Tea HOBBS' INFUSER is unequalled. Its cost is soon repaid by the saving in the quantity of tea used. Price 1s. 6d. from all China Dealers, Grocers, Chemists, &c., or post free direct, 1s. 9d.

HOBBS' INFUSER CO., Limited,
Offices:—12, WOOL EXCHANGE, LONDON, E.C.; CREWKERNE; and 62, NORTH STREET, BRIGHTON.

APPOINTMENT OF AGENTS.**UNITED KINGDOM TEA COMPANY,****21 MINCING LANE, LONDON,**

Are prepared to entertain a limited number of applications from Traders of undoubted standing to be appointed Agents or the sale of the Company's Teas. A Liberal Commission will be allowed. The Agency will be found to be a valuable one, entailing little, if any, trouble to the Agent, in addition to which it will be the means of bringing numerous customers to him, who will patronise his general business.

Address the Secretary—**UNITED KINGDOM TEA COMPANY, LIMITED,****Offices—21 MINCING LANE, LONDON, E.C.****PEARSE & WHEATLEY, 42 MINCING LANE, LONDON**

(Telegraphic Address—PACIFICUS LONDON.)

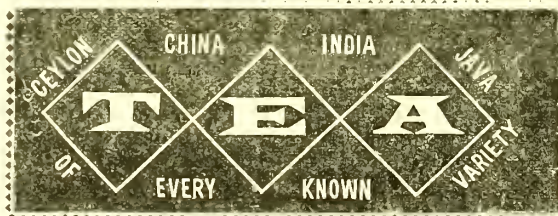
WHOLESALE DEALERS & EXPORTERS OF TEA, COFFEE, ETC.

SUPPLY AT LOWEST MARKET RATES EITHER FOR HOME CONSUMPTION OR EXPORT.

In original Boxes, Half Chests, or Chests, as imported.

Duty Paid or under Bond.

Prices and Samples on application.



Or in Lead or Foil Packets (½ lb., 1 lb., 1 lb., &c.),

Or in kilos., ½ kilos., or fractional parts, for countries using these weights.

Fancy Tin Boxes any size or weight.

SPECIAL BLENDS OF TEA (Duty-paid prices quoted)

No. A.	No. T.	No. 1.	No. 2.	No. 2a.	No. 3.	No. 3a.	No. 4.	No. 4a.	No. 5.	No. 5a.	No. 6.	X.
10d.	11d.	1/	1/2	1/3	1/4	1/5	1/6	1/7½	1/9	1/10½	2/	2/4

In Boxes, 20 lbs. or 40 lbs.; ½-Chests, 60 lbs.; or Chests, 100 lbs. 60 lbs. carriage paid to any Station in England or Wales. Terms—Net Cash with order.

CEYLON TEAS (PURE)—

IN LEAD PACKAGES (½ lb., 1 lb., or 1 lb.)

Most attractively labelled.

Culloden	Grange	Shen	Orwell	Mooloya	Pen-y-lan	St. Ley's
1 4	1 6	1 8	1 10	2 2	2 6	2 9

Duty-paid Prices.

(For Export under Bond, 6d. per lb. less.)

Export Department.—Teas or Coffees in Bond. Shipped to any part of the world. Terms, f.o.b. London; against banker's credit or remittance Samples, Price Current, and every information on application.

RAW COFFEES (Duty 14s. cwt.).

Rio, Santos, Costa Rica, Mocha, East India, Mysore, Naidobatum, Jamaica, Porto Rico, Ceylon, Guatemala, Manila, Java, &c.

COFFEES

AT MARKET PRICES.

ROASTED COFFEES (Duty Paid).

10½d., 1/1, 1/2, 1/3, 1/4; Mocha, 1/5.

In Bags, 28 lbs., 56 lbs., or 112 lbs. net. Bags free

Also supplied Ground in 7 lb., 14-lb.,

28-lb., or 56-lb. tins.

THE NEW FRENCH COFFEE—CAFE FRANCAIS

to sell t 10d., 1/1, 1/4, and 1/6, in ½ lb., 1 lb., and 1 lb. Canisters. Most attractively labelled, without any firm's name appearing.

MILK IN POWDER
Unsweetened or Sweetened. The Cheapest, Purest, and most Nutritious of all similar productions.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
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BOVRIL

will be paid to any charitable object if it can be shown that one ounce of the nutritious constituents of BOVRIL does not contain more real and direct nourishment than 50 ounces of Liebig's or any similar Meat Extract, Bouillon, or Beef Tea. — JOHN L. JOHNSTON, Proprietor, 30 Farringdon Street, London.

"RAMORNIE." **LIEBIG'S** Extract of Meat.

1-lb. Jars.....per lb.	8/2	.....per doz.	74/0	2-oz. Jars.....per lb.	7/0	.....per doz.	10/8
1/2-lb. Jars....."	8/4	....."	38/0	1-oz. Jars....."	7/8	....."	5/9
4-oz. Jars....."	8/7	....."	19/9	1/2-oz. Jars....."	8/0	....."	3/0

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Finchburgh Avenue, E.C.

6 lbs. Carriage Free.

TO AGRICULTURAL CHEMISTS.

HAYWARD'S POWDER SHEEP DIP

Kills Ticks, Lice, &c., Cures Scab, and Prevents Maggot Fly Striking.

MIXES INSTANTLY WITH COLD WATER.

COSTS ABOUT A HALFPENNY PER SHEEP.

This preparation has been thoroughly tested both at home and in the Colonies, and has proved highly satisfactory. It does not leave any sediment when mixing, and is perfectly safe in use. In attractive yellow packets; neither the Powder or wrapper is affected by age, and there is no fear of the packet bursting. In various sizes.

Terms, Price List, and Full Particulars on application.

NOTE.—We are desirous of making Special Arrangements with Chemists as to Agencies Special Labels, Advertising, &c., and we invite Correspondence. A Sample Packet post free.

HAYWARD'S FLY POWDER

FREE FROM POISON.

EFFECTUALLY KEEPS OFF THE MAGGOT FLY.

In Packets, 6d., for 12 to 15 Sheep.

In Perforated Tins, 1s. 3d., for 25 to 30 Sheep.

SAMPLE, PRICES, &c., ON APPLICATION.

We also supply this with the Chemist's own name on Packets, or in Bulk.

TOMLINSON & HAYWARD,

MANUFACTURING CHEMISTS,

Estab. 45 Years.] **LINCOLN.** [Estab. 45 Years.

Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

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Apollinaris (Hunyadi, Fried-
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Barnett and Foster
Chemists' Aërated Waters
Association
Durrant, Geo., & Co.
Ellis (Rathin)
Evans, Sons and Co.
Hay, W.
Hassall and Co. (Citric Acid)
Phosphine
Hunyadi Janos
Idris and Co.
Ingram and Royle
Jewsbury and Brown
Johannine Mineral Water Co.
(Lim.)
Kinmond & Co.
Mills and Co. (Lyonne)
Taylor, T., and F. J.
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BITTO PLANT

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Ehsh, W. J., and Co. (Foam
Producers, &c.)
Favarger, H.
Gueret Frères
Tyler, Hayward, and Co.

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Morris and Callard (Salts)
Putz and Hendrichs
AGENCY
Haydon's Chemists Defence
Agency
AGENCIES ABROAD
Australian Drug Co.
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(Canada)
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Fougere (New York)
Kempthorne (New Zealand)
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Roberts (Paris, &c.)
Rocke (Melbourne)
Sharlund & Co. (Auckland, N.Z.)
Soul, W. H., and Co.

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Howards and Sons (Cinchona)
Smith, T. H.

ALMILAJ

Mercer, L.

ANALYSIS

Rait, G. L., F.C.S.

AMMONIA

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Bracher & Co. (Automatic
distilling)
Clarke, S. (Food Warmer)
May, Roberts (Water-bath)
Orme (Scientific)
Perken, Son and Rayment
(Scientific)
Rothermel, Paul (Vinegar)

SANDGAGES

Bailey, W. H., and Son
Bole Hall Mill Co.
Robinson and Sons
Schutze, F., & Co.

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Maw, Son and Thompson
Pattison, G.
Seabury and Johnson
Solport Bros.

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Austin and Co. (Cardboard)
Irvin and Sellers
Metz, Paul (Willow)
Noakes, B., & Co.
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Howards & Sons
May and Baker

BEESWAX & HONEY

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Howards and Sons
May and Baker
Rymes and Co.
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Newball and Mason

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Churchill, J., and A.
James, Dr. Prosser
Keene and Ashwell
Kimpiton R.
Loisette, Professor
Pritchett, W. E.
Robinson, G. H.
Wells, G.
Wright, J., and Co.

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India Rubber)
Duke and Co.
Goodall, H. A., and Co. (Tooth)
Sutton, O., and Co. (Tooth)

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Beedler, J., and Co.
Line-in and Midland Count
Drug Co.

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Barrett, R. H.
Brady and Hinchliffe
Breth's (Lins)
Brooks, Peel (Perfume)
Hearn, E. A., and Co.
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Kilner Bros.
Lang, J., and Co.
Maw, Son and Thompson
Pots
Too good

BUTTER COLR, &c.

Bush, W., and Son (Mari-
goldine)
Johnsen and Jørgensen
Olsfeld, Pattison and Co.
Tomlinson and Hayward

CAMPBELL

Howards and Sons
Keene and Ashwell
May and Baker (pathic)
Maw, Son and Thompson

CARMINE

Bush, W. J., and Co.
Sellers

CASC. SAGRADA

Duncan, Flockhart and Co.
Squire and Sons
Evans, Sons and Co.

CAPSULES

Donnan, J. (Medicinal)
Duncan, Flockhart and Co.
(Cascara Sagrada)
Duncan, F. and Co.
Evans, Sons and Co.
Hooper, B., and Co.
Maw, Son and Thompson

DITTO (METALLIC)

Betts and Co.
Melin, C. (Machine)

CATALOGUES

Maw, S. Son and Thompson
(Price Current)
Newbery, F., and Sons
Sanger and Son
Thompson, Millard and Co.

CHEMICALS

Bennett and Jenner
Bush, W., Son and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Gaskell, Deacon and Co. (Bi-carbonate of Soda)
Goodall, Backhouse and Co.
Greiff, R. W., and Co.
Hill, A. S., and Son
Hooper, B., and Sons (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
May and Baker
Oscar Andree and Co.
Prunk, Davis and Co.
Stern, G. and G. (Pumiline)
Sumner, R., and Co.
Smith, T. and H., and Co.
White, A., and Sons
Zimmerman, A. and M.

CHALK PRECIP.

Dunn and Co.
Levermore, Aug., and Co.
White, A., and Sons

CHEST PROTECTRS

Maw, Son and Thompson
Wood, V.

CHL. OF POTASH

(Compressed Tablets)
Burroughs, Wellcome and Co.
Hooper, B., and Co.

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.
New Carbolic Sanitary Co., Ltd.

CHLOR OF GOLD

Oscar Andree and Co.
Rowland, L.

CHLORODYNE

Blyton-Bage and Co. (Twem low's)
Burroughs, Wellcome and Co.
Davenport, Browne &
Freeman, R.
Thomson, Wakeham and Co.
(Dr. Henry's)
Towle, A. F.

CHLOROFORM, &c.

Duncan, Flockhart
Macfarlan, J. F.
Smith, T. and H.
Zimmerman

CIGARETTES

Evans, Sons and Co.
French Hygienic Co. (Coca)

CITRIC ACID

Nascio, Aveline and Co.

COCAINE HYDRO.

Houde, A.
Howat's and Sons

COCA WINE

Armbricht, Nelson and Co.
Evans, Sons and Co.
French Hygienic Co. (Cigarettes and Tobacco)

COCOA & CHOCOLTE

Cadbury
Fry (Malted)
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanbury's
Brekke and Howell
Burroughs, Wellcome
Evans, Sons and Co.
Hill, A. S., and Son
Lorimer and Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

COFFEE

Symington Co. (Coffee Ess.)

COLLEIBLE TUBES

Betts and Co.
Brooks, H., Peal and Co.

COMPRESSD MDCNS

Allen and Hanbury's
Burroughs, Wellcome and Co.
Hooper, B., and Co.

CONFECTIONERY

Bage, Blyton and Co.
Gibson, R., and Sons
Kerfoot, T.
Warrick Brothers

CONCENTD. LIQS.

Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Keith, B., and Co.

CORKS

Benito, Remus and Co.
Bishop and Warden (Socks)

CORN CURES

Maw, Son and Thompson
Robinson B.
Solport Bros.
Thompson, M. F.

COTTON WOOL

Haynes G., & Co. (Absorbent)
Maw, Son and Thompson
Robinson and Sons (Absorbent)
Sanger, J., and Son
Seabury and Johnson

DENTIFRICES

Du Bayer, Marie
Jewellery and Browne
Newbery and Sons
Butler, O., and Co.
Thompson and Capper
Woods, W. (Arecia Nut)

DISINFECTANTS

Government Sanitary Co.
Hamilton and Co.
Hornby, A.
Hygienic Paper Co.
Jeyes
National Chemical Co.
New Carbolic Sanitary Co., Ltd.
Sanitas Co.

DISINTEGRATORS

Carter, J. H.
Hardy Patent Pick Co., Ltd.

DOG MEDICINES

Spratts (Patent)

DRUGGISTS' SUN.

Ayrton and Saunders
Bishop and Warden (Cork Socks)
Evans, Lechner and Sons
(Hawley's Counter Adjuncts)
Evans, Sons, and Co. (Savara)
Hill, A. S., and Son
Idris and Co.

Lynch and Co.
May, Roberts and Co.
Newbery, F., and Sons
Pattison, G.
Sanger and Sons
Schutze and Co.
Thompson, Millard and Co.
Toogood, W.
Wood, Vincent

DRUMS, CANS, &c.

Noskes and Co.

EAU DE COLOGNE

Farina, J. M.

EFFERVESCENT

Allen and Hanbury's (Saline)
Bishop, A., and Sons
Fritz and Co.

ELECTRIC APPAR.

Colthurst & Harding (Electric Light Oil)
Darton, F., and Co.
Orme and Co.

EMBROCCATION

Barrett, Jo-hua
Clay, V.
Elliman, Sons and Co.

ENEMAS

Ingram and Son
Maw, Son and Thompson
Sanger and Son
Schutze, F., and Co.

ENGRAVERS

Derker, W., and Son

ESSENCES, FRUIT

AND SOLUBLE
Bratby and Hinchcliffe
Burgoyne, Burbridge and Co.
Bush, W. J., and Co.
Bush, W., Son and Co.
Cummack, J.
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
Lorimer and Co.
May and Baker
Oldfield, Pattison and Co.
Stallan and Fulton
Stevenson and Howell
Vogt, G.
Warrick Brothers
Wright, Layman and Umney

ESSENTIAL OILS

Bush, W., Son and Co.
Bush, W. J. (Lemonas &c.)
Cocking, J. (Japan Peppermint)
Cummack, J.
Evans, Sons and Co.
May and Baker
Nascio, Aveline and Co.
Rocke, Tompitt and Co. (Antiseptic Poultice and Vingar)
Stevenson and Howell
Vogt, G.
Warrick Brothers
Wright, Layman and Umney

ETHER

Duncan, Flockhart and Co.
(Chloroform)
Howard and Son
May and Baker
Robbins
White, A., and Sons

EUCALINUM

Rocke, Tompitt and Co. (Antiseptic Poultice and Vingar)

EUCALYPTUS OIL

Downie, B. I. P. Co.
Fletcher, Fletcher & Stevenson

EXTRACT, MEAT

Australian Meat Co.
Brand and Co.
Johnston's Fluid Beef
Jelly & Co.

EXTRACTS, FLUID

Allen and Hanbury's
Benger, U., and Co.
Burgoyne, Burbridge
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Heaton, Squire and Francis
Oldfield, Pattison and Co.

FEEDING BOTT.

Hearn, E. A., and Co.
Kilmer Bros.
Maw, Son and Thompson
May Roberts and Co.
Pocock, Keevil and Co.
Thompson, Millard
Toogood, W.

FLY PAPERS

Ford, Shapland and Co.
Wilson, S.

FILTERING

Doulton and Co.
Mawson Swan, and Weddell
Slack & Broderick
Silicated Grlm Filtr Co.

FOAM PRODUCERS

Bush, W. J. and Co.

FOOD WARMERS

Clarke, S.

FOOD (Infants & Invalids)

Allen and Hanbury's
Benger's Concentrated
Brand and Co.
Dahl's Dispersa Cakes
Goodall, Backhouse and Co.
Heaton, Squire (Malted)
Johnston's Fluid Beef
Lazony, E., and Son
Lichir Co.

Maclean and Son
Mottershead and Co. (Benger's Food)
Nestle, H.
Ridge's, Dr. Food
van Abbott (Diabetic)

FORMULE

Brooks, T.

GINGER ALE

Adams, B.
Kimmond and Co.
Hay, W. (Essence)
Mills, R. M.

GLYCERINE

Fink
Martindale, W. (Nitro-Glycerine Tablets)
Maw, Son and Thompson
Price's Candle Co.

GRANULAR PREP.

Bishop, A., and Sons
Burroughs, Wellcome and Co.
Bush, W., and Co.
Evans, Sons and Co.
Heaton, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUMS

Fink (Arabic, &c.)
GUTTAPERCHA
Duncan, Flockhart

HAIR PREP.

Bates, F. W. (Frizzetta)
Brodie, J. (Imperial Hair Dye)
Chesebrough Manfg. Co.
French Hygienic Co.

HERB BEER EXTS.

Adams, B.
Newhall and Mason
Oldfield, Pattison and Co.
Potter and Clarke

HERBALISTS

Adams, B.
Newhall & Mason (Ext. of Herbs)
Gorter and Clarke
Wilkinson, A., and Sons (Compressed Hops)

HOMOEOPATHIC

Epps and Co.
Keene and Ashwell
Leath and Ross
Thompson and Capper
Watts, J. J., & Co.

HOPS

Wilkinson, A., and Sons (Compressed)

HOP ALE ESSENCE

Hay, W.

HOSPITALS

London Homoeopathic
HYPHOPHITES
Duncan, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher & Stevenson
Symes & Co.
Swann, H. H. (Dr. Churchill's)
Westman, F. J.

INK (See MARKING.)

Bowley and Draper
Duncan, Flockhart

INHALERS

Godfrey and Cooke
Maw, Son and Thompson
Toogood, W.

INSECTICIDES

Greiff, R. W., and Co.
Sanford
Werner and Co.
Vogt, G.

KETCHUP

Tyrer, P.

LARD

Ewen, J.

LAMPS, LIGHTS, &c.

Clarke, Samuel ("Fairy")

LEECHES

Fitch and Nottingham
Potter and Clarke

LIME JUICE

Idris and Co.

LINSEED

Idris and Co.
Mumford, G. S.

LINT

Liverpool Lint Co.
Maw, Son and Thompson
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hanbury's
Blyton, Bage & Co. (Medicated)
Evans, Sons and Co.
Ginsler, R., and Sons (Manfrs.)
Hill and Son
Houde, A. (Hydrochlorate of Cocaine)
Kerfoot, T.
Lorimer and Co.
Martindale, W. (Nitro-Glycerine Tablets)
Warrick Brothers (Heliotrope Pastilles)

LOOFABS

Maw, Son and Thompson
May, Roberts and Co.
Sanger and Sons

MACHINERY

Carter, J. H.
Hardy Patent Pick Co., Ltd.
Meln, C. (Caoutchouc)
Werner and Pfleiderer

MAGNESIA

Banner, E. R. (Citrates)
Bishop, A., and Sons
Bush, Son and Co.
Dinneford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Kerfoot, T. W. (Citrates)
Lorimer and Co. (Citrates)
Oscar Andree and Co.

MALT EXT., ETO

Heaton, Squire and Francis
Paterson's Chemical Manufacturing Co.

MENTHOL

A. Menthol Depot, A. W.
Shirley, Proprietor
Castle Menthol Co.
Cocking and Co.
Hockin Wilson and Co.
Maw, Son and Thompson
Shirley, A. W.

MARKING INKS

Barber, G., and Co. (Crimson)
Christian, J.
Hickissou, J.

MEASURES

Hicks, J. J.

MEDICINE CHESTS

Day, Son and Hewitt (Veterin)
Day and Sons

MERCURIALS

Bush, W., and Co.
Howards and Sons
May and Baker

METHYLATED**SPIRITS**

Burroughs, J.
Harvey, J. & W., and Co.
Jones and Co.
Macnair, J. & D.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.
Perken, Son and Raymont

MILE

Nestle, H. (Condensed.)
Swiss Milk Co.

MIXING MCHNRY

Bracher and Co.
Carter, J. H.
Werner and Pfleiderer

MORPHIA

Macfarlan, J. F., and Co.
Smith, T. and H.

MUSTARD

Banner, L. R. (Oil)
Johnson, J. H. and S. (Ess. Oil)

NEPENTHE

Ferris and Co.

NIGHT LIGHTS, &c.

Clarks, S.
OILS, PAINTS, &c.
Colthurst and Hardine
Gregory, W. (Devonshire Oils)
Prunk, Davis and Co.
River Head Oil Mills Co.
Vogler, The Charles A., Co.
(St. Jacob's Oil)

CONTINENT BASES

Chesebrough (Vaseline)
Grindley (Petroleum Jelly)

OPTICIANS

Darton, F., and Co.
Perken, Son and Raymont
Raphael, J., and Co.

PAPAIN FINKLER

Kuhn, B.

PARALDEHYDE

Zimmerman, A. and M.

PATENT AGENTS

Horn and Son

PATENT MEDCNS

Armbricht, Nelson & Co. (Coca Wine)
Atkinson (Infant Preserv)
Burgett, Joshua
Beecham (Pills)
Beedler, J., and Co.
Croucher, F. B. (Wafers)
Dahl's Dispersa Cakes
Edwards and Sons
Evans, Lechner (Hawley's Counter Adjuncts, Coated Pills, &c.)
Fanning's (Powders)
Holloway (Pills and Oint.)
Horn, Burtons & Co.
Kemp, W. H. (Whooopoline)
Lalor (Phosphodyna, &c.)
Lincoln (Clarke's Mix.)
Lyuch and Co.
May, Roberts and Co.
Mears, L.
Morton, H.
Munday, J. (Injection Day)
Newbery and Sons
North Medicine Co.
Ratti and Co. (Neuphrosine)
Roberts (Foreign)
Singleton's Eye Ointment
Thompson, Millard and Co.
Vogler, The Charles A. Co.

PERFUMERY, FANCY SOAPS.

Atkinson, J. and E.
Atkinson, J. and Co.
Bigeston, E. R.
Burroughs, Wellcome and Co.
Chesebrough Manufacturing Co.
Crown Perfumery Co.
Du Boyer, Marie
Duncan, Flockhart
Even (Soaps)
Hall's Wood Violet
Greensill, T. S., and Son
(Mona Bouquet)

Mack, H.
Maw, Son and Thompson
Mount Carmel Soap Co.
Newbery and Sons
North Medicine Co.
Pear's Soap (Dirty Boy)
Royal Perfumery Co.
Sainsbury, S. (Lav. Water)
Stern, G. and G. (Pumiline)
Treatt, R. C.
Warrick Brothers
West, T. (Oke's Mona)
Woolley, Sons and Co. (Powder)

PEPSINE, &c.

Burroughs, Wellcome and Co.
Fletcher, Fletcher & Stevenson
Greiff, R. W., and Co.
Newbery (Inglavin)
Warrick and Co. (Inglavin)
Zimmerman

PEPTONES

Denacayer's Peptone Co., Ltd.

PEROX. OF HYDR.

Dunn and Co.
Robbins and Co.

PHARM. PREPS.

Allen and Hanbury's
Barron, Squire and Co.
Benger's
Burgoyne, Burbridge
Burroughs, Wellcome (Various)
Duncan, Flockhart
Ferris and Co.
Fletcher (Liqs. for Syrups)
Greiff, R. W., and Co.
Heaton, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Keith (Conc. Tinctures)
Kuhn, B.
May & Baker (Phenacetine)
Martindale Nitro Glycerine
Sellers, J.
Southall Bros
Tyoka & Kine
White, Alfred and Sons
Woolley, Sons
Wyley (Various)

PHOTOGRAPHIC

Potwright and Grey
Howards and Sons (Chemicals)
Perken, Son and Raymont
Marion and Co.
May and Baker
Oscar Andree and Co.
White, Alfred and Sons

PLASTERS

Mather, W.
Maw, Son and Thompeon
Quilliam, J., & Co.
St. Dalmas, A. De
Seabury and Johnson
Smith, W. F.
Thompson, M. F.
PILLS (Coated, &c.)
Allen and Hanburys
Beecham, Thomas
Evans, Sons and Co.
Hearon, Squire and Francis
Hill, A. S., and Sons
Hooper, Dr.
Lorimer and Co.
McKesson and Robbins Ovoid-
capsuled
Newbery and Sons
Sanger, J., and Sons
Smith, W. F.
Sonthall, Bros. and Barclay
Swann, H. H.
Warner, W. R. (Coated)
Wyleys and Co.

PILL MACHINES

Maw, Son and Thompson
Pindar, J. W.
Robertson, J., and Co. (Coating)
Toogood, W. (Coater)

PINE PRODUCTS

Burroughs, Wellcome and Co.
Mack, Joseph
Stern, G., and G.

ODOPHYLLIN, &c.

Keith, B. and Co.
Smith, T. and H.

ORCELAIN GDS.

Poths, H., and Co.
Toogood (E.C. Pots, regist.)
Clark, W.

OLISHING

Baumgartner (La Brillantine)
Bradley, Bourdas (Albatum)
Clark, W.

ORINTING

Bell and Stone
Bowers Bros.
Facsimile Apparatus Co.
Ford, Shapland and Co.
Silverlock, H.

UMICE STONE

Goldschneider, E. (Artificial)
Gibson, B.
Oscar Andree and Co.
Zimmermann

UMILINE

Stern, G. and G.

UMINE SALTS

Heilgers, F. W., & Co.
Howards and Sons
Kuhn, B.
Oscar Andree and Co.
Zimmermann

RENNET

Benger's (Essence of)
Duncan, Flockhart and Co.
Johnsen and Jorgensen
Oldfield, Pattinson and Co.

SACCHARIN

Allen and Hanburys
Burroughs, Wellcome and Co.

SALICINE

Macfarlan and Co.
Smith, T. and H., and Co.

SALOL

Kuhn, B.

SAUCES, PICKLES

Goodall, Backhouse and Co.
Lazenby (Harvey's)
Tyrer, P.

SCHOOLS OF

PHARMACY,
HOSPITALS, &c.
Central School of Chemistry
and Pharmacy
Edinburgh Classes
Liverpool School
London Homoeopathic and
Medical School
London Hospital and Medical
College
Manchester College
Royal Dicks' Veterinary College
South London School of
Pharmacy, Lim.
The School of Pharmacy
Tully, J.
University of Glasgow
Westminster College

SEALING WAX

Fisher, Clark and Co.
Waterston, G., and Sons

SELTZOGENES

Idris and Co.
May, Roberts and Co.

SHEEP DIP

Cooper, W., and Nephews
Grindley and Co.
Tomlinson and Hayward

SHOP FITTERS

Bowling and Govier
Bygrave, J. and W.
Corsan, J. R.
Howlett, S.
Natal, E. (Show Cases)
Yates, W. S.

SOAP

Maw, S., Son and Thompson
Pear's Soap
Stern, G. and G. (Pumiline
Toilet and Sanitary)

SPONGE

Cresswell Bros.
Cresswell, R., and Cr. (Lim.)
Maw, Son & Thompson (Bags)
Peterson, M., and Co.

STAMPS (RUBBER)

Hickisson
Pollard, A. W.
Richford, E. M.
Van Houten and Co.

STOPPERS

Anstin and Co. (Sprinklers)
Barnett & Foster (The Eclipse
Brooks, Peel (Sprinklers)

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Eichmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson
Robinson and Sons
Schulze, F., and Co.
Thompson, Millard and Co.
Woolley, Sons and Co.
Wood, Vincent

STARCH

Critchley (Gloss)

SUGAR

Gibson, R., and Sons

SULFONAL

Burroughs, Wellcome and Co.
Greiff, R. W., and Co.
May and Baker

SYPHONS

Barnett and Foster
Idris and Co.
Kilner Bros.

SYRINGES

Maw, Son & Thompson, S.
Schulze, F., and Co.
Sumner, R. and Co.

SYRUPS

Churchill, Dr.
Fletcher, Fletcher (Liquors)
Idris and Co.
Swann, H. H.

SPECTACLES

Botwright and Grey
Darton, F., and Co.
Raphael and Co.

SPRIT

Boord and Son
Burrough (Pine & Methyl.)
Harvey, J. W., and Co.
Jones and Mason (Methyl.)
Macnair, J. & D.
Phillips and Co.
Smith, Stephen and Co.

SPONGE

Cresswell Bros.
Cresswell, R., and Cr. (Lim.)
Maw, Son & Thompson (Bags)
Peterson, M., and Co.

STAMPS (RUBBER)

Hickisson
Pollard, A. W.
Richford, E. M.
Van Houten and Co.

STOPPERS

Anstin and Co. (Sprinklers)
Barnett & Foster (The Eclipse
Brooks, Peel (Sprinklers)

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Eichmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson
Robinson and Sons
Schulze, F., and Co.
Thompson, Millard and Co.
Woolley, Sons and Co.
Wood, Vincent

STARCH

Critchley (Gloss)

SUGAR

Gibson, R., and Sons

SULFONAL

Burroughs, Wellcome and Co.
Greiff, R. W., and Co.
May and Baker

SYPHONS

Barnett and Foster
Idris and Co.
Kilner Bros.

SYRINGES

Maw, Son & Thompson, S.
Schulze, F., and Co.
Sumner, R. and Co.

SYRUPS

Churchill, Dr.
Fletcher, Fletcher (Liquors)
Idris and Co.
Swann, H. H.

TEA

Cave, Johnson and Co.
Gt. Tower St. Tea Co.
Heseltine, Wm., and Son
Hobb's Infuser Co.
Kearley and Tonge
Pearse and Wheatley
United Kingdom Tea Co.
Walker and Dairympie

THERMOMETERS

Darton, F., and Co.
Hague, J. J. (Clinical)
Maw, Son and Thompson
Perken, Son and Rayment
Raphael and Co.

TIN CANISTERS

Noakes, B., and Co.

TOILET PAPER

Downing, J. S.
Hygienic Paper Co.

TOOTH PASTE

Jewsbury and Brown
Maw, Son and Thompson
Sutton, O., and Co. (Black)
Woods, M. (Arca)

TRADE MARKS

Horn and Son

TRUSSES

Bailey, W. H., and Son
Haywood, J. H.
Lynch and Co.
Maw, Son and Thompson

TYPE-WRITING

Facsimile Apparatus Co.
Hickisson (Rubber)
Pollard, A. W.
The Universal "Simplex"
Type-Writer

URETHANE

Howards, Sons and Co.

VACCINATION

Sumner, R., and Co. (S. field)
Vaccine Association (Lymph)

VALUERS AND

TRANSFER AGENTS
Baker, P. C.
Orridge and Co.
Tomlinson and Sons

VARNISH

Clark, W.
Colthurst and Harding

VASELINE

Chesebrough Manufacturing Co.

VERMIN KILLERS

Battle, J. R.
Sanford and Son
Steiner and Co.

VETERINARY

Clark, W.
Corner, R. (Devonshire)
Day and Sons
Day, Son and Hewitt
Elliman, Sons and Co.
Gregory, S. V. (Vesico Sudorific)
Gregory, W. (Devonshire Oils)
James, W. H. (Biller)
Soratts (Dogs)
Vogeler, The Charles A.
Tomlinson and Hayward
Walton, J.

VINEGAR

Rothermel (Making)

WAFERS

Crouch, F. B. (Damiana)

WHELESLE & EXPT

DRUGGISTS
Allen and Hanburys
Barron, Squire and Co.
Burgoyne, Burdidge
Bush, W., Son and Co.
Evans, Lecher and Webb
Evans, Sons and Co.
Evans, Sons and Mason (Lim.)
Ferris and Co.
Goodall, Backhouse and Co.
Harker, Stag and Morgan
Hearon, Squire and Francis
Hewlett and So
Lorimer and Co.
Hill, A. S., and Son
Oldfield, Pattison and Co.
Potter & Clarke (American, &c)
Sonthall Bros. and Barclay
Sumner, R., and Co.
Synes and Co.
Thompson, Millard and Co.
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
Wright, Layman and Umrey
Wyleys and Co.

WINDOW TABLETS

Corsan, J. R. (Engraved)

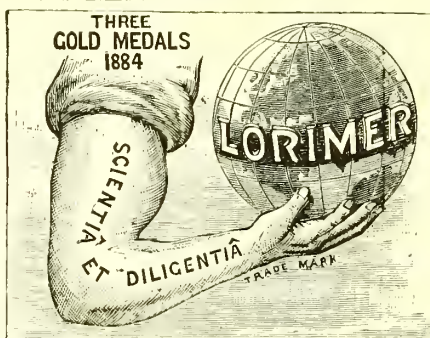
WINE AND SPTS

Boord and Son
Coleman and Co.
Durrant, G. (Orange)
Goodall, Backhouse and Co.
Idris & Co. (Quinine Wine)
Ingram and Royle
Phillips, G., and Co. (Pure
Spirits of Wine)
Smith, Stephen, & Co. (S.V.R.)
Robinson, B. (Orange)

USE **LIEBIG** **COMPANY'S** **EXTRACT** **OF MEAT.**

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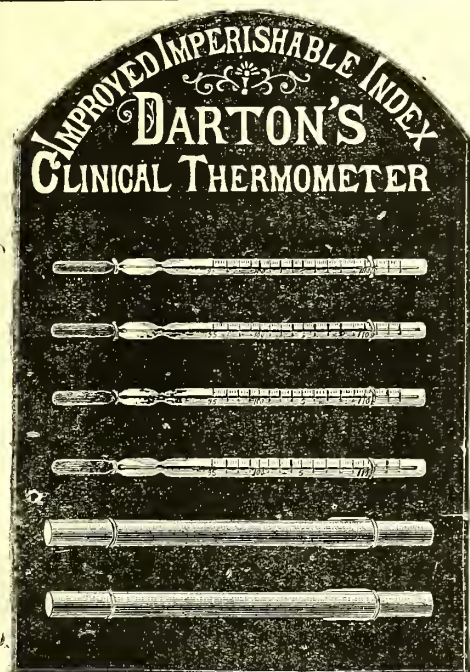
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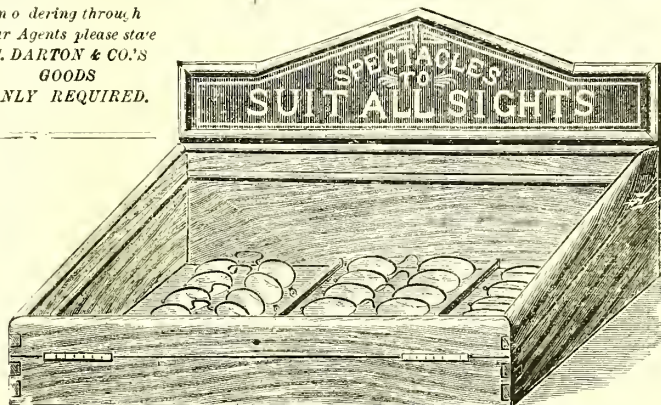
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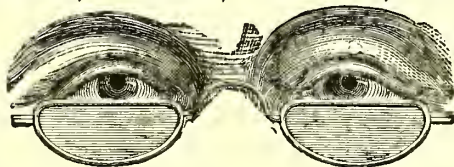
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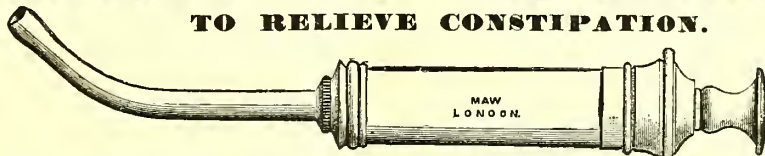
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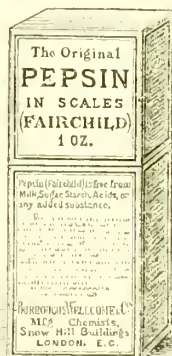
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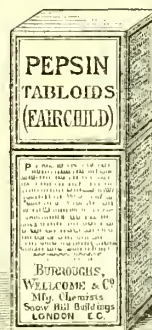
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PEPSIN (FAIRCHILD) is supplied in the form of scales for *multi gulations* and general manufacturing purposes, in powder for dispensing, and Tablets (1 gr.) for *easy administration to fastidious patients*. The Fairchild Pepsin is rapidly superseding the ordinary pepsins, many of which are utterly worthless. Fairchild's Pepsin is no more expensive than most of the common pepsins, though it possesses many times the strength and activity.



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Fairchild's Pepsin in Powder same prices

1 gr. each, 25 in bottle, retail, 1s. 6d.; per doz., 14s.
" 100 " " 4s. 6d.; " 42s.
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CAUTION.

"TRADE MARK" AND NEW REGISTERED LABEL.

Messrs. J. & E. ATKINSON desire to draw particular attention to their new steel-engraved shield-shape Label, printed in two colours, blue and yellow, which they have introduced for the better protection of their customers against fraud. This new Label is now *exclusively* employed for all articles, in conjunction with the usual "Trade Mark"—a "White Rose" on a "Golden Lyre"—printed in seven colours. Messrs. J. & E. ATKINSON continue to manufacture their articles of *one and of the very best quality only*. Any goods bearing their name, but not having affixed to them the new Label as well as the "Trade Mark," should be rejected as fraudulent imitations.

Messrs. J. & E. ATKINSON further warn their customers that their **SOLE ADDRESS**, which appears in full on their "Trade Mark" and new Label, is 24 OLD BOND STREET, LONDON, and that they are not in any manner related to or connected with any other firm carrying on business under the same or similar name.

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Applied only to persons connected with the Trade.

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

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POST-CARD COMPETITION.—No. 8.

We invite post-card communications on any of the hundred subjects named on pages 158, 159, and 160 of THE CHEMIST AND DRUGGIST, August 4, and for the best we offer the usual prize of one guinea. Competitors may write their essays on one, two, or three post-cards. Subscribers or their employés only are eligible to compete, and all essays must reach us before August 31.

PARLIAMENTARY NEWS.

THE IRISH PHARMACY BILL.—SECOND READING.—During the early hours of Friday morning last (August 3), the promoters of the Irish Pharmacy Bill, which has successfully accomplished its journey through the House of Lords, managed to secure a second reading in the Lower Chamber. The absence of opposition seemed strange; but apparently the night there was an armed truce. But if any hopes were entertained that the other stages would be overcome as easily they were doomed to disappointment. Committee was appointed for the next night, and when the order was reached, M. T. M. Healy at once intimated that it would meet with strenuous opposition, and many important amendments would have to be moved. This notice practically sealed the fate of the Bill, at any rate for these sittings. There may be a slight chance of pushing it through in the autumn; but the Pitt Lord of the Treasury has already relegated to that session work sufficient for two ordinary sessions, and therefore the prospects of carrying to a successful issue either of the two Pharmacy Bills this year may be described as "diminutive".

LONDON DRUG STATISTICS.

THE following figures refer to the stocks of the principal drugs in the Port of London on July 31, 1888, and to the imports and deliveries from January 1 to July 31, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1888	1887	1888	1887	1888	1887
Aloes ..cs & pkgs	6,397	4,673	3,600	2,212	2,925	2,762
" ..gourds	3,211	2,47	597	20	3,064	19
Anise, Star ..chts	189	343	100	217	91	108
Arrowroot ..cks	15,019	14,833	10,942	11,401	8,836	8,380
" ..bxs & tins	7,807	8,700	3,374	7,481	5,613	3,286
Balsams ..cks, &c.	291	673	149	493	453	506
Bark, Medicinal						
cks & cs	15,556	9,688	17,819	18,918	14,031	17,165
snus, &c.	46,733	49,356	23,932	25,611	24,845	30,721
Borax	1,841	2,553	617	2,156	11	807
Calumba	2,353	1,544	988	1,051	1,287	1,034
Camphor	2,634	4,274	5,288	3,625	4,652	5,527
Cardamoms ..chts	1,000	1,132	1,966	2,627	1,707	2,228
Cochineal ..snus	4,959	5,591	1,977	1,786	2,294	3,057
Cocci. Ind. bgs, &c.	483	502	454	294	257	232
Cream of Tartar cks	11	11	13	18	15	18
Cubebbs	130	113	207	277	190	256
Dragon's Blood cks	64	143	114	89	129	93
Galls, China, &c. cs	4,468	3,037	8,144	3,343	5,386	2,684
Trky & Prsn sks	4,703	6,005	5,978	4,704	4,352	2,630
Gum—						
Ammoniac pkgs	154	282	8	128	84	131
Animi & Copal pkgs						
Arabic	5,599	3,939	6,539	3,607	5,329	4,610
Asafoetida	15,178	11,030	17,493	8,269	13,687	13,029
Benjamin	412	543	257	72	295	356
Bursera	2,007	1,845	2,147	1,441	1,697	1,233
Damar	2,767	4,261	2,429	2,992	3,111	3,473
Galbanum	—	—	—	1	—	1
Gamboge	100	176	128	178	134	205
Guaiaacum	32	114	3	48	48	20
Kino	127	67	66	12	30	37
Kowrie	1,259	711	1,889	1,110	1,40	1,217
Mastic	118	111	47	8	30	23
Myrrh	430	492	394	593	378	329
Olibanum	5,493	5,188	6,694	5,438	5,118	3,703
Sandarac	1,343	1,261	1,154	900	820	945
Tragacanth	5,791	942	7,384	1,748	3,497	1,405
Indiarubber, E.I. tons	468	239	508	416	295	272
Madagascar	44	17	77	46	58	37
S. American	174	115	250	272	189	121
African, &c.	633	238	576	447	532	422
Total	1,325	669	1,411	1,111	1,074	852
Indigo, Bengal cks	5,632	6,629	6,883	7,901	4,272	5,453
" Madras	1,028	742	815	805	706	794
" Kurpah	7,172	5,372	8,783	6,246	4,449	5,281
" Mauilla						
" Figs, &c.	1,715	2,085	1,199	1,497	1,103	1,290
" Total East						
Indian cks	15,547	14,228	17,786	16,449	10,536	12,823
" Spanish snus	3,685	2,514	5,947	3,729	4,097	3,154
Ipecac. cks & bags	51	191	296	292	367	207
Jalap	115	174	66	59	102	39
Lac Dye	6,085	7,605	—	28	386	234
Myrabolans	9,151	8,355	5,483	6,673	6,859	6,273
Nux Vomica pkgs	413	423	831	238	934	494
Oils—						
Anise	41	167	90	110	115	109
Cassia	72	188	128	210	158	119
Castor	704	534	285	395	472	457
"	10,578	4,850	9,760	3,725	6,691	5,314
Cocoa-nut	2,114	2,088	2,718	3,192	2,420	2,407
Olive	912	1,062	1,594	3,181	1,359	2,956
Palm	256	165	147	57	99	71
Opium	1,493	1,953	372	1,038	934	1,223
Rhubarb	1,045	1,536	790	814	972	1,130
Safflower	189	266	117	131	300	236
Sarsaparilla	672	549	918	941	743	764
Senna	1,102	1,062	971	1,978	2,385	1,776
Shellac, Orange cks, &c.	51,693	41,703	28,990	24,593	18,972	16,846
Garnet	18,787	17,542	8,897	10,213	5,793	4,230
Buttton	10,475	12,515	4,853	6,523	5,089	5,405
Total	80,980	74,860	42,745	41,239	23,571	26,342
Sticklac	4,375	4,266	893	557	893	403
Gambier	395	707	4,942	6,254	6,371	7,192
Catch	2,623	814	3,859	1,323	2,91	1,550
Turneric	3,394	1,750	1,456	1,029	683	1,192
Vermilion, cks, &c.	25	7	39	14	77	61
Wax bees'						
snus	479	933	218	543	333	652
" cks & cs	1,597	1,492	1,463	1,637	1,543	1,515
" cakes	3	3	24	11	—	—
Wax, Japan	1,349	873	1,312	434	875	923

Metropolitan Reports.

THE FLOODS.—The Lord Mayor has accepted an offer made by the Jeyes' Disinfecting Company to apply their product in the East-end districts which have been recently flooded, and where consequently great danger of noxious effluvia exists.

ALLEGED FRAUD ON WHOLESALE DRUGGISTS.—George William Hammond (43), charged with having obtained eau de Cologne from Messrs. Hearon, Squire & Francis on a forged order, was again brought up at the Guildhall on Wednesday. He was again remanded till Thursday next.

CRICKET.—A match was played at Raynes Park on July 31 between Barclay & Sons' C.C. and the Camwal C.C. (the latter being the abbreviated title of the Chemists' Aged and Mineral Waters Association, Limited, C.C.). Messrs. Barclay's eleven could only total 14 among them. The Camwals had reached 27 for the loss of two wickets when play was stopped.

THE WALTHAMSTOW MYSTERY.—At Walthamstow on Wednesday Mr. C. C. Lewis, the Essex coroner, resumed his inquiry as to the death of Mrs. Annie Mary French, for which William Barber, aged 39, a chemist's assistant, of Walthamstow, now stands remanded at Stratford Petty Sessions, charged with administering a certain noxious drug on July 21 last. Dr. Charles M. Tidy said he was one of the Government analysts, and on July 25 he received at the London Hospital six jars and bottles sealed. He described the contents of each bottle. No trace of chloroform odour could be detected when the bottles were first opened, nor could any chloroform be found upon detailed examination. He thought death had resulted from morphia poisoning. A murderous dose of the drug must have been taken. The deceased might have placed the bottle back in the surgery after taking the morphia. It was stated that two bottles of morphia were found in the shop. This concluded the evidence. The coroner, in summing up, said the case was more and more difficult and mysterious. He had to leave the matter in the hands of the jury. If a medical man, qualified or unqualified, took upon himself to administer medicine, and by gross negligence administered more than he ought, that would make such person guilty of manslaughter; while if an overdose were wilfully administered, he would be guilty of murder. The jury returned a verdict to the effect that Mrs. French came by her death through morphia poison; but whether taken by herself or given by another person or persons there was not sufficient evidence to show.

SELLING METHYLATED SPIRIT AS A BEVERAGE.—At Worship Street Police Court on Friday last Bernard Zeitlin, 17 Princes Street, Spitalfields, was summoned by the Excise to answer two informations—(1) for having sold methylated spirit as a beverage for consumption, contrary to the Spirits Act, 43 and 44 Vic., cap. 24, section 130, whereby he had incurred a fine of 100*l.*; and (2) for selling wine without being licensed for the same, contrary to the Act 6 George IV., cap. 81, whereby he had incurred a penalty of 50*l.* Mr. Powell prosecuted for the Inland Revenue. Defendant did not appear. According to the evidence it appeared that the Excise authorities had engaged a man to purchase some of the "brandy" and "wine." Mr. H. W. Davies analysed it and said he found the nine bottles of "brandy" submitted to him to contain methylated spirits, flavoured with aniseed and coloured. The two bottles of wine were called raisin wine. They were above the strength allowed to be sold without a licence, containing 23.9 per cent. of proof spirit. Mr. A. J. Llewellyn, a supervisor of Excise, said that on the evening of the day of the sale he had an interview with the defendant, who said that he knew nothing of the sale. Witness had arrested his son the same morning for smuggling spirits. He searched the house, and found in the cellar an apparatus for manufacturing spirits. Mr. Powell asked what the defendant was, and the witness answered that the shop was ostensibly a grocer's shop, but Zeitlin was also a rabbi of the neighbouring synagogue. Mr. Powell said the offence charged was a serious one, and was believed to be largely practised in the East-end of London, where the "brandy" was sold in the restaurants and small eating-places. It was,

however, an offence exceedingly difficult to detect. Mr. Bushby said he should inflict a fine of 50*l.* on the first summons, and of 20*l.* on the second, imprisonment in default of payment or distress to follow for three months and six weeks respectively.

INFRINGEMENT OF THE MEDICAL ACT.—THE TITLE OF DOCTOR.—At the Hammersmith Police Court, on August 3, Francis Reid Walsh, of Holland Road, Notting Hill, appeared to answer a summons at the instance of the Medical Alliance Association, taken out under the 40th section of the Medical Act, for falsely assuming a title implying that he was registered as a medical practitioner. Mr. C. J. C. Pridham appeared to prosecute. Jane Wright, the wife of a carpenter living in Portland Road, Notting Hill, said she was a patient of the defendant, who opened the Holland Road Dispensary. In a conversation he said it was reported that he was not a qualified man, but he was a doctor, and lost his diploma under a bill of sale. A week afterwards he said he was about to sell the dispensary, and that morning he said he received his diploma from Edinburgh. The defendant said he mentioned a certificate from the Queen's University. The witness was positive he said a diploma. Charles Strachan said defendant attended his wife. A receipted bill was produced, bearing defendant's signature, in which the names of Walsh and Husband appeared, and "physician and surgeon." The witness said that he and his wife afterwards entered the defendant's service. Witness was engaged as attendant upon the patients. He never saw Mr. Husband. The defendant when he first came to his (witness's) wife said he was the doctor from the dispensary. He always thought he was a doctor, and a clever man, or he would not have allowed him to attend upon his wife. Other patients were called, one being a young woman, who stated that she was seduced by Dr. Walsh. Mr. Pridham produced a copy of the "Medical Register" for the current year to prove that the defendant was not registered. The defendant said he was not prepared to defend the case in the absence of his solicitor. He admitted opening the dispensary on the understanding that a medical man would join him. He did not join him, and as he (the defendant) incurred debts he worked the dispensary to pay them. Mr. Curtis-Bennett said the Act, which was a most beneficial one, was passed to prevent unqualified persons from acting as medical men. He fined the defendant 20*l.* with 3 guineas costs.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BATH.

THE BRITISH ASSOCIATION MEETING.—*Truth* says:—"The hospitality of the Bath people is certain not overflowing. The local committee for arranging for the reception of visitors have made about 633 applications to residents, and there have been only 86 favourable answers; 330 sent no reply, 210 refused, and seven were unable to make up their minds on the subject."

In justification of the 210 who have refused, it must be remembered that the Association has been to Bath before, and, according to general report, those who have entertained distinguished scientists once do not often care for the honour a second time.

BIRMINGHAM.

MIDLAND COUNTIES CHEMISTS' ASSOCIATION.—A cricket match between the married and single members of this association will take place at Cannon Hill Park on Wednesday next, August 15. Wickets to be pitched at 2 P.M. prompt.

THE EARLY CLOSING MOVEMENT has signally failed here among chemists. Among prominent reasons we may record that a large number have the post office attached to their business; secondly, they find themselves unable to

close even on Sunday night; and, thirdly, one of the most influential houses, which has also a retail attached, finds it inconsistent with the smooth working of their large business.

BRIGHTON.

PRIZES.—The Brighton Association of Pharmacy decided recently to offer two prizes to students in chemistry at the Brighton School of Science and Art. At the meeting of the committee of the latter institution last week the matter was brought before them, the result being that the offer was cordially accepted, and a resolution of thanks to the Association was passed.

DERBY.

POISONED BY LINIMENT.—The coroner for Derby held an inquest on August 3 touching the death of George Fadsby, aged 47, who about eight weeks ago was attacked with rheumatic fever, which made him low-spirited. He was under the care of Dr. Curll, who gave him medicine and also some liniment for external application. On July 24 his wife found him in bed unconscious, and then discovered that he had drunk a quantity of liniment. He was immediately removed to the Infirmary, where he died. A few days previous to this occurrence he was observed to have a superficial wound on his throat, and a razor was afterwards found under the bed. The jury returned an open verdict.

LEEDS.

ACTION FOR LIBEL.—At Leeds Assizes, on August 4, Mr. Thomas Willer, chairman of the Leeds Guardians and a member of the Town Council, claimed 2,000*l.* damages from Messrs. F. White, druggist, and M. E. Appleby, master jeweller, for a libel contained in a handbill issued during the last election of Guardians, insinuating that Mr. Willer, as chairman of the board, used his position for his own ends. A verdict was given for the plaintiff, with 25*l.* damages.

LIVERPOOL.

CARBOLIC ACID AGAIN.—Two Irishwomen have been poisoned at Liverpool by drinking carbolic acid from a bottle which they thought contained rum. According to the report from the hospital one woman was dead, and there was little hope of saving the life of the other.

MARGATE.

ALLEGED FRAUD.—A young man named William Arnold elbly appeared before the Margate borough magistrates last week on two charges of obtaining money by false pretences. In the first case prisoner succeeded in getting 3*l.* 7*s.* 6*d.* from Mrs. Fagg, of the White Hart Hotel, and in the second case 1*l.* from Mr. Sutton, chemist, High Street, both for cheques on the Hackney Branch of the London and Provincial Bank. They were supposed to be drawn by firms who had no account there, and were returned. Prisoner was remanded until Friday of this week.

WARWICK.

A CHEMIST CHARGED WITH STEALING ROSES.—At the Penilworth Sessions on August 1 Henry Mann, chemist, Priory Road, Warwick, was summoned for stealing two roses, value 2*d.*, from Dromore, Warwick New Road, the property of Messrs. Green & Sons. The defendant did not appear, and the service of the summons having been proved, some evidence was taken, and the bench decided to issue a warrant for the apprehension of Mann.

IRELAND.

DUBLIN.

THE PROSECUTIONS BY THE PHARMACEUTICAL SOCIETY.—Ballybay against Thomas McCabe and Arthur Fee for compounding medical prescriptions came before the local bench

on July 30, and resulted in a defeat of the prosecutors. The defendants were represented by Mr. McWilliam and Mr. Molloy, solicitors, who argued that it was necessary for the Council to show that these persons were not named on the register of "chemists and druggists," and that as the Society had neglected to prepare such a register they could not furnish this proof. The bench adopted this view, and dismissed the charges, allowing 20*s.* costs in each case.

OPPOSING THE PHARMACY BILL.—A meeting of the Chemists and Druggists' Association of Ireland (Dublin branch) was held in the Central Lecture Hall, Westmoreland Street, on Monday evening, August 6. Mr. W. J. McNeight presided. Mr. Boyd said the object of the meeting was to take steps to assist the North of Ireland Chemists' Association in opposing the measure now before Parliament, which, if passed in its present form, would affect injuriously the chemists and druggists of Ireland. It was resolved, "That a society be formed in Dublin to work in conjunction with the North of Ireland Chemists and Druggists' Association for the protection and advancement of chemists and druggists in Ireland, to be called 'The Chemists and Druggists' Association of Ireland (Dublin Branch).'" Mr. James Hanson, Capel Street, was appointed hon. secretary, and Mr. C. Johnstone, Sackville Street, hon. treasurer. The following resolutions were adopted:—

1. That having read and fully discussed the proposed Irish Pharmacy Act, 1875, Amendment Bill now before Parliament, and while recognising the necessity of providing a proper register of qualified pharmaceutical chemists and chemists and druggists, we consider the Bill deals most unfairly with the rights of chemists and druggists, and we hereby empower our committee to take whatever steps they may think necessary to oppose the Bill, unless such concessions can be obtained from the promoters as will satisfy our just demands.

2. That having regard to the undoubted intention of the principal Act to establish permanently two grades of persons entitled to retail poisons and having regard to the requirements of the country and the interests of the public, we consider the Bill should provide for the continuance of the two qualified classes, (a) "pharmaceutical chemists," entitled to dispense prescriptions; (b) "chemists and druggists," entitled to retail poisons, but not to dispense prescriptions; further, that every reasonable facility should be given to persons holding the Minor qualification of becoming candidates for the Major, and that an apprenticeship of four years under either should entitle a candidate to present himself for the final examination of pharmaceutical chemist.

3. That we express our unqualified condemnation of the degrading and insulting clause, No. 13, introduced by the Select Committee of the House of Lords into the Bill, as being quite uncalled for, and absolutely without precedent.

4. That copies of the foregoing resolutions be forwarded immediately to the members of Her Majesty's Government, members of Parliament, and members of the Council of the Pharmaceutical Society of Ireland.

Mr. S. P. Boyd was deputed to proceed to London to co-operate with the deputation from the North of Ireland Chemists and Druggists' Association.

SCOTLAND.

ABERDEEN.

A WELCOME GIFT.—At a bazaar held on Tuesday in aid of the funds of the Turf Bowling, Curling, and Lawn Tennis Club Mrs. Dr. Mortimer had for sale a selection of Messrs. Lorimer & Co.'s specialities, which to the value of 13*l.* had been presented by the firm.

ANNAN.

DEATH FROM CHLOROFORM.—On Sunday afternoon the wife of Mr. Andrew Rae, tailor, Annan, died suddenly under painful circumstances. She had been in the habit of taking chloroform for the toothache, and had done so on Sunday for this purpose. She had evidently inhaled too much, as when found in her room she had breathed her last. Dr. McBean was called in, but too late to be of any assistance, and certified that death had resulted from an overdose of chloroform.

EDINBURGH.

MR. GEORGE COULL, pharmaceutical chemist, president of the Edinburgh Chemists' Assistants and Apprentices' Association, has passed in chemistry, botany, and natural history for the first B.Sc. examination.

AN ALARMING EXPLOSION of chemicals occurred on August 3 on the premises of the Leith Depôt (Limited), Leith Walk. An assistant, while preparing a quantity of stuffs of a combustible nature, was surprised to see the whole go up in a blaze. The fire-brigade were soon on the spot, but fortunately the blaze had exhausted itself in the first flare. Damage to the extent of about 30% was done. The explosion is reported to have taken place in the course of making up coloured fires for a fancy fair. If the circumstances are as reported, it is probable that the company have rendered themselves liable to a heavy penalty.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The botanical excursion announced last week took place on Wednesday. The party left the Caledonian Station at 6.20 A.M., reaching Currie about ten minutes to seven. A few minutes' walk brought them to the Poet's Glen, which had been fixed upon for the practical work. The unusual poverty of wild flowers and the general backwardness of vegetation were again manifest, and it was observed that many of the deciduous trees were already showing autumnal tints, and had even to some extent shed their leaves prematurely. After a pleasant ramble in delightful weather, the company returned to town by train, reaching Princes Street at 8.30 A.M. Good specimens of *Campanula latifolia*, *Hypericum pulchrum*, *Lapsana communis*, *Lathyrus pratensis*, *Rhinanthus Crista-galli*, *Scabiosa succisa* and *arvensis*, *Spiraea Ulmaria*, and *Vicia Cracca* were among the plants collected. This concludes the excursions for the season.

GLASGOW.

DR. ALEXANDER NAPIER, Crosshill, has been elected Professor of Materia Medica in Anderson's College Medical School in room of Dr. Martin, who has resigned.

STOW.

POISONED BY SHEEP DIP.—At Lugate, near Stow, a little girl, daughter of R. Torrie, ploughman, has been poisoned. The cottage in which she lived is situated near the banks of the Lugate stream, two or three miles below where sheep-dip troughs are supposed to have been washed out in the water. It seems the children in their play had been drinking of the water. Two of them were taken ill. One recovered; the other, in spite of all that medical skill could do, succumbed on Sunday night.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

FOREIGN GOODS AT THE HYGIENE EXPOSITION.—By Presidential decree, issued July 27, the Palais de l'Industrie shall for the time of the exhibition constitute a legal bonded warehouse (*entrepôt réel des douanes*). Therefore all foreign goods intended for exhibition shall be allowed to be forwarded thither in transit direct, without payment of duties or search by custom-house officers.

THE HYÈRES POISONING CASE.—On appeal the sentence of the Comte de Villeneuve was commuted from twenty days to forty-eight hours' imprisonment, the fine remaining unaltered. Of course the civil suits for damages will now begin. This ends the criminal side of the case; but how did arsenic find its way into the wine? was it added by mischance or malice? are points which remain as mysterious as ever.

DARWINISM AT THE SORBONNE.—The Paris Municipal Council some time since offered to endow at the Sorbonne Faculty of Sciences a chair of "biological philosophy." The proposition was accepted by the Sorbonne people, on condition, however, that the word "philosophy" be dropped from the title, and some other name, such as "evolution" or "morphology," be substituted. The emendation having been favourably received, the chair is to be inaugurated next session, and Professor Giard, formerly of the Lisle Faculty of Sciences, has been appointed to fill the position.

EXPLOSION IN A WHOLESALE DRUG HOUSE.—On August 2, at Grenoble, a porter employed by MM. Lance and Duprey, of the Rue Condillac, accidentally broke a demijohn of benzine in a cellar, and a fire soon resulted. The porter himself, Millett, was not seriously injured, but while firemen

and the police were fighting the flames a violent explosion took place, severely burning Commissary of Police Troutwein, two firemen, and M. Soulié, a medical student. Considerable material damage was done before the fire could be put out.

EUDES, EMILE-FRANÇOIS-DÉSIRÉ, the former "general" of the Commune, who suddenly died last Sunday, began life as a pharmacist's assistant. He was born at Romey (Manche) in 1843, and served three years (1859-62) at Coutances with a pharmacist of the place. Thence he came to Paris, and duly entered his name at the College as a future candidate for the diploma of the second class—he not holding the baccalaureate degree. For three years more he obtained regular employment, in Rue Montaigne, and then Faubourg St. Antoine, in Paris, but finally left pharmacy for politics and journalism militant. His political career was notorious enough, but it would be out of place to here relate it, save to say that for several years he was a refugee in England.

THE TUBERCULOSIS CONGRESS, after a session lasting over a week, separated last Tuesday evening, not, however, without losing one member, a Hungarian delegate, who died in Paris during the convention. The congress adopted the following resolutions, which are to be presented to the different Governments, as its desiderata:—(1) Simple instructions should be written and widely published, indicating how tuberculous infection through aliments—especially milk—is to be avoided, and how virulent germs contained in the sputa, bedding, &c., of tuberculous persons can best be destroyed. (2) The principle of seizing and totally destroying all meat derived from tuberculous animals, no matter how slight the specific lesions may have been, should be generally applied and enforced by all possible means, the owners being duly indemnified. (3) All dairies where milch-cows are kept to supply milk for general consumption should be especially inspected, to guard against contagious diseases liable to affect man. (4) Councils of hygiene should be empowered to consider all questions relating to contagious diseases of domestic animals, even such of them as are not at present considered transmissible to man. For besides cow-pox, rabies, charbon, glanders, and tuberculosis, other contagious diseases may hereafter be found requiring similar precautions. The inevitable Mme. Huot was of course present at most sessions and excursions. She cannot complain of having been persecuted, as although she was at times obstreperous, and at Alfort flourished her legendary umbrella in defence of a hen, she was ever courteously treated.

THE EXHIBITION OF LIFE-SAVING AND HYGIENE in the Palais de l'Industrie was officially opened last week, but as it is to last until November 25 the exhibits are much behind-hand, especially as regards hygiene and life-saving proper. The first dealers to be ready are the regular inmates of most expositions, who offer for sale all sorts of novelties, fancy and artistic goods, and tempting *articles de Paris*. Although in reality foreign to the aim of the exhibition, all those tasteful show-cases and attractive counters are rather a pleasing sight, and lend life and animation to the scene. The other day the most interesting object perhaps was outside, in the shape of a Farcy gunboat, high and dry in the Champs Elysées. The unfortunate craft is intended to float on the artificial basin dug in the centre of the hall, which she can easily do, since, notwithstanding her heavy rifled cannon and 80-horse engine, she draws but two feet of water. Only she was found too broad to go in through the gates, and either a breach must be made through the walls or she must stay outside. For that matter she is as well there, for last Friday the basin began to leak, and had to be emptied out for repairs. It is about 250 paces long and 50 wide, with some 5 feet in depth. A grand life-saving performance was announced for that day, and all the life-boat crews were to show their prowess. But instead of all this the tide was out, the crafts were stranded in a corner, and the men were tossing pennies behind Godard's captive balloon. Upstairs pharmacy promises to be well represented—at some future time, for at present the exhibitors are very backward. An interesting feature will be an old-time apothecary shop, "*Aux vipères d'or*," containing antiquated mortars and historical appliances, which is to be contrasted with the elegant modern pharmacy; but admittance is yet denied to the old shop, while many glass cases of the modern "officine" still remain empty, with the names of the future occupants only chalked on the glass panes.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on Wednesday, August 1, present the President (Mr. James E. Junker, M.A.) in the chair, the vice-president (Mr. Draper), and Messrs. Allen, Wells, Doran, Charles Evans, Beggs, McCormack, and Dr. Tichborne.

A letter was received from the secretary of the Pharmaceutical Society of Great Britain acknowledging the receipt of the Calendar for 1888 of the Pharmaceutical Society of Ireland.

THE PHARMACY BILL.

A letter, dated July 7, was received from Dr. John William Moore, Registrar of the King and Queen's College of Physicians, intimating that that college intended to petition the House of Commons in favour of the Pharmacy Act (Ireland) Amendment Bill now being promoted by the Council, and requiring the names of the members of Parliament who were to introduce the Bill in the House of Commons.

The President said that at the time he received Dr. Moore's letter he was not sure by whom the Bill would be introduced in the House of Commons, but suggested that the Solicitor-General for Ireland would probably consent to present the petition of the college in that House. The Solicitor-General has since done so.

A letter was received from Dr. Archibald H. Jacob, Registrar of the Royal College of Surgeons, stating that the President and Council of the college had had before them the communication of the Council in reference to the Amendment Bill, and that he had been directed to say that, as the Bill had passed through a Select Committee of one House of Parliament and would probably be advanced in the House of Commons before the college could take any useful action in the matter, the President and Council regretted that they were unable to take at present such active steps as were suggested, but that should any question arise requiring its intervention the college would be happy to confer with the Pharmaceutical Society as to what steps should be taken.

The letter was ordered to be marked "Read."

DELEGATES TO THE BRITISH PHARMACEUTICAL CONFERENCE INVITED.

A letter was read from the honorary secretaries of the British Pharmaceutical Conference, which is about to be held in Bath, requesting to be furnished with the names of delegates who should go from the Society to the approaching meeting.

The PRESIDENT: It is expected that they will have a very successful meeting. The local men are working the matter up.

Dr. BEGGS intimated his intention of attending the Conference, and the registrar was directed to defer replying to the letter until he should receive the names of other delegates.

ATTENDANCE AT ANNUAL MEETINGS.

The CHAIRMAN said a letter had been received on July 27—too late for insertion on the agenda-paper—from Mr. Hill, on a very important subject, namely, the expediency of changing the hour for holding the annual meeting in October from four o'clock in the afternoon to some hour in the evening. He was himself strongly in favour of such a change. It would, if made, require the sanction of the Privy Council in order to be valid for the next annual meeting; it was therefore, important that it should be settled that day; but on the other hand, he was reluctant to ask to have the standing orders suspended with a view to the consideration of the subject now, lest absent members of the Council might hereafter complain of want of notice.

Dr. WELLS: Is it only by a by-law that the hour is fixed?

The PRESIDENT: That is all. It is directed that the annual meetings shall be held at four o'clock P.M. on the first Monday in October.

On the motion of the Vice-President, seconded by Mr. Wells, it was unanimously resolved to suspend the standing orders and consider the letter of Mr. Hill.

The PRESIDENT read the letter, which was signed by thirteen licentiates. It stated that the hour of four in the afternoon had not induced country members to attend the

annual meeting, whilst it was almost prohibitory as regarded the attendance of members who were in business in Dublin. Accompanying the letter was a return showing the numbers of members of the Society not on the Council, and of members of the Council, who had attended the annual meetings from 1880 to 1887 inclusive, from which it appeared that the largest attendance at any annual meeting had been nineteen, of whom thirteen were members of the Council. He (the President) had always looked on that as an unwholesome state of things, and anything that could be done to increase the attendance of members of the Society at the annual meeting he should, for his part, be most happy to facilitate.

The VICE-PRESIDENT: We ought to give every possible attention to the request of these gentlemen. Anything that can be done to increase the attendance of members at the annual meeting should be willingly acceded to by the Council. The question is whether members of the Council who had already attended a meeting in the afternoon could be present at another meeting at eight o'clock; however, we must not consider our own convenience at all.

Mr. DORAN said he thought the request a very proper one, and that it should be acceded to by all means.

The VICE-PRESIDENT: How many members of the Society who were not members of the Council attended the last annual meeting?

The PRESIDENT: Five.

Mr. BEGGS moved that, in compliance with the memorial, the hour for the annual meeting be changed from four o'clock P.M. to 7.30 P.M.

Mr. MCCORMACK seconded the motion, which was unanimously agreed to.

THE RESERVED RIGHTS OF MEDICAL PRACTITIONERS.

A letter was read from Dr. Laffan, of Cashel, claiming certain rights for medical practitioners in reference to their apprentices. The writer stated that he had a pupil whom pecuniary circumstances had obliged to abandon the medical profession: and he asked the Council to accept the apprenticeship which the pupil had already served him in lieu of the time required by the Council from candidates for the licence. Dr. Laffan stated that he was himself a registered medical practitioner anterior to the passing of the Pharmacy Act (Ireland) of 1875; and he contended that that Act reserved to such practitioners all the rights that it conferred on members of the Society.

The PRESIDENT said: What Dr. Laffan wanted was that the certificates he gave to his apprentices should be recognised by the Society. He (the President) wrote to him, in reply to his letter, stating that no doubt his right to compound and dispense medicines was preserved by the Act of 1875, but that from the beginning to the end of that Act there was not a word about apprenticeship, and that the only binding regulations affecting apprenticeship were those made by the Council of the Society and sanctioned by the Privy Council. Dr. Laffan had, in reply to that letter, written a second one to Mr. Ferrall.

Mr. Ferrall read Dr. Laffan's second letter, dated July 24. It argued that the President's letter had admitted his contention, since, if a certain class of registered practitioners were entitled to keep open shop they must perforce be entitled to take apprentices therein; and if these were deprived of any privileges enjoyed by their fellows anterior to the passing of the Pharmacy Act it clearly amounted to a curtailment of the privileges of their masters. One of those privileges was that any pupil of theirs might, after six months' service, tender such service to the Apothecaries' Hall in full satisfaction of the term required to be spent behind an apothecaries' counter.

The President said it was desirable that the distinction which now exists generally in Ireland between medical practitioners and pharmacists should be maintained. They did not want to have medical practitioners becoming dispensers of medicine if they could prevent it.

The registrar was directed to write to Dr. Laffan, stating that the Council had nothing to add to the information they had already given him.

THE PHARMACY BILL.

The President made a brief report on the present position of the Pharmacy Act Amendment Bill, and said that, in con-

sequence of the state of turmoil into which the House of Commons had been brought, there was not much prospect of getting the Bill through until the autumn session.

CORRESPONDENCE.

A letter was received from the secretary of the organising committee of the Congresses of Medicine and Pharmacy to be held at Barcelona next September inviting the co-operation of the Society.

A donation was received from the American Pharmaceutical Association of a copy of their National Formulary.

On the motion of Mr. Draper, seconded by Mr. Evans, a vote of thanks was passed to the American Association.

MOVING.

On the motion of the President, seconded by Mr. Wells, it was resolved to give the necessary twelve months' notice of surrender of the premises at present held by the Society at No. 11 Harcourt Street.

THE EXAMINATIONS.

Reports from the examiners of the July examinations were laid on the table.

The PRESIDENT said it appeared from these reports that at the Preliminary examination there were twenty-one candidates, of whom twelve passed, and nine were rejected. At the examination for the Licence there were twelve candidates, of whom four failed. He (President) was present during Dr. Whittle's examination, and that gentleman was very much inconvenienced by the state of the museum and the want of a suitable collection of standard specimens. The collection of a complete set of *materia medica* specimens was entrusted to a small committee.

On the motion of Mr. Allen, seconded by Mr. Wells, Mr. John Evans was unanimously re-elected examiner in practical pharmacy.

On the motion of the President, seconded by Mr. Beggs, Mr. T. W. McMurray, of the Medical Hall, Clonmel, was unanimously elected a member of the Society.

Some financial business having been disposed of, the Council adjourned.

Gazette.

PARTNERSHIPS DISSOLVED.

- Borron, C., & Co., Newton-le-Willows, glass bottle manufacturers.
 Kindersley & Johnson, Marsh Gate Lane, Stratford, manufacturing chemists; as far as regards E. N. M. Kindersley.
 Murray, W. H. J., & E. J. (under the style of Thomas Murray), Barbican, patent medicine proprietors.
 Patry & Pasteur, Mining Lane, City, East India and Colonial brokers; as far as regards M. H. Pasteur.
 Wynter-Blyth & Bloxam, Mansion House Chambers, Bucklersbury, City, consulting chemists and analysts.

THE BANKRUPTCY ACT, 1883.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

- Dards, Joseph, Old Kent Road and London Road, mineral water manufacturer—Aug. 15, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; Sept. 13, 34 Lincoln's Inn Fields.
 Jones, Edward, Canberwell New Road and New Street, Kennington, chemist—Aug. 14, 33 Carey Street, Lincoln's Inn; Sept. 6, 34 Lincoln's Inn Fields.
 Nish, John Carisford, Manchester, drysalter, aniline dye merchant, and agent—Aug. 10, Official Receiver's offices, Manchester; Aug. 15, Court House, Manchester.
 Steadman, George, Sheffield, botanist—Aug. 14, Official Receiver's offices, Sheffield; Aug. 23, County Court Hall, Sheffield.

NOTICES OF DIVIDENDS.

- Abbott, William Hodson, Annesley Woodhouse, Newstead, Kirkby, and Kirkby Folly, Nottinghamshire, surgeon—first div. of 2s. 6d., Aug. 15, 16 Fletcher Gate, Nottingham.
 Whitehead, Ebenezer, King's Lynn and Bawsey, Norfolk, accountant, oxide of iron merchant, and paint manufacturer—first and final div. of 6d., forthwith, office of Trustee, King's Lynn.

Legal Reports.

Re THE GENERAL APOTHECARIES' COMPANY.

We reported last week the application to Mr. Justice North on behalf of this company for a reduction of capital. When the Court resumed on August 2,

Mr. Grosvenor Woods submitted that what the shareholders intended by their resolution was merely to deal with the issued capital, and to leave the unissued capital as it stood at present. The affidavits which had been filed in support of the petition showed that the proposed reduction was a proper one, and he asked his lordship to sanction the proposal.

His lordship sanctioned the proposed reduction.

SELLING A CHEMIST'S BUSINESS—CLAIM FOR COMMISSION.

ON Tuesday in the City of London Court, before the Deputy-Judge (Mr. O. B. C. Harrison), the case of Hawkins v. Bridges came on for hearing. It was an action brought by the plaintiff, Mr. Thomas Hawkins (trading as Orridge & Co., medical agents, 32 Ludgate Hill, E.C.) against the defendant, Mr. E. C. T. Bridges, chemist, formerly carrying on business at 7 Market Place, Station Road, Willesden, to recover the sum of 11*l.* 5*s.* commission on the sale of his business, with a modified claim of 8*l.* 15*s.* in the event of the purchase price being less than the plaintiff originally understood.

Mr. Fillan, barrister, appeared for the plaintiff, and Mr. Muggeridge, solicitor, represented the defendant.

In opening the case Mr. Fillan said the reason of the amended claim was that the price which the defendant wanted for his business first was 350*l.*, and after the sale to Mr. Robert Kerr it was believed for some time that that was the amount realised. The plaintiff was unable to discover the whereabouts of the defendant, but ultimately he ascertained that he was living with his father in Devonshire, and that the actual money paid by Mr. Kerr was 250*l.*, and on the ordinary scale of agents' fees of 5 per cent. on the first 100*l.*, and 2½ per cent. on the rest, the action would consequently be for the recovery of the lesser amount mentioned above, namely, 8*l.* 15*s.*

Mr. Muggeridge, in answer to the learned judge, said the defence was simply that the plaintiff was not the actual introducer of the purchaser, but another agent, to whom commission had already been paid.

Mr. Thomas Hawkins, the plaintiff, was then called, and deposed that in the month of February he was consulted by the defendant with reference to the sale of his business at Willesden, and advertised it several times.

There was a long correspondence, which was opened in the first instance by the defendant, and he (the plaintiff) had interviews with various persons with a view to a sale. His advertising expenses were 3*l.* The defendant supplied him with particulars, of which he made lithographed copies, and sent them to a great many likely purchasers. Amongst them was Mr. Kerr, who called upon him on April 23, and was informed that the price was 350*l.* At the same time he told Mr. Kerr that, as Mr. Bridges was ill and anxious to dispose of his business, that figure was not a binding one, and that a lower offer might be accepted. He was sure that Mr. Kerr knew nothing about the business until he introduced it to him. He heard nothing more from the defendant, though he became aware indirectly that he and Mr. Kerr were negotiating. After the sale he wrote to the defendant about the matter, taking care to register the letter. It was not returned, and though he received no reply it must be assumed that it reached its destination.

In cross-examination the plaintiff said he gave Mr. Kerr full particulars on April 23. He had not seen him since. He believed Mr. Kerr went to Mr. Baker, of Pimlico, who took the matter up and effected the sale. They were, to the best of his knowledge, personal friends.

Mr. J. P. Parkes, traveller to Messrs. Herring & Co., wholesale druggists, Aldersgate Street, deposed that the defendant spoke to him about the sale of his business, and he recommended Orridge & Co. as most respectable agents. The defendant informed him that he had had a letter from

at firm to the effect that particulars had been given to several applicants, but added that he had not seen any of them. That was on Saturday, May 5. At the same time he said he had had a visit from somebody on the Thursday previous with an order to view, but he did not know the gentleman's name. Upon that witness told the defendant that a gentleman, who afterwards proved to be Mr. Kerr, had called upon him on the subject, and, in reply to an inquiry as to who had given him information about the business, Mr. Kerr acknowledged that it was Orridge & Co. On the following Sunday the defendant came to his house, and repeated his statement about a gentleman calling on the Thursday.

Cross-examined: The defendant wanted him to sell the business, but he never tried. In fact, he never did, for the very good reason that, though people promised to pay gentlemen in his position a commission, they generally backed out of the promise on the plea that they were not licensed buyers. (Laughter.) Consequently he always took the precaution to recommend a licensed agent. If he did part of the work he would naturally expect a part of the commission. He did not know that Mr. Baker was an agent until he saw his advertisement in a trade journal some weeks ago.

Re-examined: He had received a letter from the defendant from Devonshire, in which the latter admitted that 250% was the price he received.

For the defence, Mr. Muggeridge said his client sent particulars of his business to a number of agents, doubtless including the plaintiff. Each of these agents sent forms for the defendant to fill up and return, and he informed them all that his price was 350%. No offer, however, was made until the lapse of some months, when Mr. Baker introduced Mr. Kerr, with the result that an offer of 250% was made and accepted, the money paid, and the whole transaction completed.

Mr. E. T. C. Bridges, the defendant, admitted that he first asked Mr. Parkes to find a purchaser, and that he recommended Orridge & Co. alone. However, he sent particulars to other agents. When the plaintiff wrote inquiring if he had heard from any of the names given, he answered in the negative. Mr. Kerr was introduced to him about a week before the sale by Mr. Baker, to whom he had paid 84.15s. commission. In cross-examination, he would not say that Mr. Parkes was telling an untruth about the interviews spoken of, but he thought he was mistaken about the dates. On one person called about purchasing the business, and that turned out to be Mr. Kerr, whom he asked on May 3 to call on Mr. Parkes as a reference respecting the stability of the business. Mr. Parkes on May 5 told him that Mr. Kerr had called. There were some dates he could not himself remember, as certain documents had been lost in the course of removal. The plaintiff wrote to him in June about the sale. He did not reply because he did not think it had anything to do with him.

Mr. Thomas Kerr, formerly an assistant to Messrs. Squire & Co., chemists, Oxford Street, said he had purchased the Wieden business. He called on Orridge & Co. previously, and they mentioned the defendant's business and another at Peckham. That would be about April 20, and from that day he had had nothing to do with Orridge & Co. On May 1 he had a letter from Mr. Baker, and when that gentleman mentioned the defendant's business he said it was no use going to see it as the price was too high. Still he did go at Mr. Baker's request, and through him bought the business for 25%, or 100% less than the original price named.

Cross-examined: He did not get particulars from the plaintiff, nor was he told that a less offer than 350% might be obtained. He did not say to Mr. Parkes that Orridge & Co. introduced him to the defendant.

His Honour here pointed out that the particulars distinctly stated that any reasonable offer would be taken into consideration.

Mr. Parson C. Baker, chemist, of Pimlico, stated that the defendant placed the business in his hands at the end of April. He was sure of that, though he had not brought his books to the court. He got his commission on the sale, for the simple reason that it was he who really introduced Mr. Kerr.

His Honour, in giving judgment, said it seemed to him that the plaintiff had not been very fairly or properly used in this matter, and the only difficulty he had was whether the defendant, having paid one person, should pay over

again under the circumstances. It would, however, be manifestly unjust for the plaintiff to be put to so much trouble without remuneration. This was not like the case of a house agent applying to sell or let property, inasmuch as the defendant approached the plaintiff in the first instance through Mr. Parkes, who had given his evidence very well, and who had recommended Orridge & Co. as most respectable agents for this sort of business. Besides, the letter written by the defendant showed that they were fully instructed to find a purchaser, and there did not appear to be any strict limit to 350%. In view of all the facts, and as an offer of compromise made by him during the hearing had been declined, he must give judgment for the plaintiff for 84.15s., with costs.

Mr. Muggeridge applied for leave to appeal, as a question of law was involved.

His Honour declined. It was only a question of fact, and he felt that the plaintiff had been treated in a shabby and improper way.

READING SAUCES.

On August 3, before Mr. Justice Chitty, a motion was made for an injunction to restrain the use of certain labels by Messrs. E. Cocks, of Clapham Junction. The plaintiff was Mr. Morris, of Reading, successor to Mr. Cocks, and proprietor of the "Original Reading Sauce." Mr. Whitehorne, Q.C., and Mr. Vernon Smith appeared for the plaintiff, and Mr. Romer, Q.C., and Mr. Thompson for the defendant. According to Mr. Whitehorne's opening statement, the plaintiff's predecessor invented the "Reading Sauce" in the year 1789, and since that time it had been continuously manufactured and sold in Reading by the same firm. In the year 1865 the word "original" was added to the name, and for the last sixteen years, according to the evidence, the plaintiff's sauce had been known in the market as the "Original Reading Sauce." The defendant, whose real name was Hughes, had been a retail grocer, and in 1886 he with his partners commenced business as a sauce and pickle manufacturer at Clapham Junction. No question turned on the use of the word "Reading," because that had become by long user *publici juris*. Defendant said he took the name of Cocks in order to avoid conflict with retail traders. Two labels used by the defendant were complained of—one bearing the words "Manufactured solely by E. Cocks, Clapham Junction," and also the statement "None genuine except that manufactured by E. Cocks & Co." That, he contended, came directly within the authority of *James v. James*, the horse-blister case, as it was a representation by this gentleman, who had carried on business for two years, that this "Reading Sauce" was manufactured solely by him, and that none was genuine except that signed with the name E. Cocks & Co. The other label of which complaint was made bore the words, "Sold by the proprietor, Reading," which was a false representation, as the defendant had no place of business in that town.

Mr. Romer said it was a practice common to the trade to put on the labels of "Reading Sauce" the words, "Manufactured by the proprietor, Reading." That had been used as a common form for a number of years, and the sauce itself had been made hundreds of years ago, and if any particular manufacturer wished to distinguish his sauce from the common form he must put something distinctive on the label. The word "original" was used for this purpose by the plaintiff, but, not content with that, he had the words, "which was prepared and sold wholesale and retail by the late J. Cocks, and now by his son and sole successor, Charles Cocks, Reading." That statement was an entire misrepresentation, and, as he contended, disentitled the plaintiff (Mr. Morris) to any relief, at any rate on an interlocutory motion.

Mr. Justice Chitty said this seemed rather a serious objection to the present motion, and he should like to hear what Mr. Whitehorne had to say to it.

Mr. Whitehorne said this was the label used by Mr. Charles Cocks, who died in 1864, and the business, after passing through the hands of several members of the family, had now come into the possession of the plaintiff, who was the son-in-law of the last possessor. He mentioned two cases which he should rely upon.

Mr. Romer said his friend was trusting to a broken reed, for those cases had been overruled long ago.

Mr. Justice Chitty thought any plain man of business, not accustomed to the various courses pursued in trade, would understand by this label that Charles Cocks was alive, and was the maker of the sauce.

Mr. Whitelorne said the only word which was incorrect was the word "now."

Mr. Justice Chitty suggested that, as there was evidently a serious question to be argued, it would be better to let the motion stand over to the trial of the action, the defendant undertaking to keep an account; and, after a short discussion, this was agreed to.

EARALINE.

IN the High Court of Justice, Chancery Division, in the case of H. Wright, Bridge Street, Bradford, plaintiff, and J. Holdroyd, Westgate, Cleckheaton, defendant, on July 19, Mr. Justice Kay granted a perpetual injunction restraining the defendant, his servants, and agents from infringing the plaintiff's registered trade-mark, No. 27,738, which consisted of the word "Earaline," in conjunction with a device, and also perpetually restrained the defendant, his servants, and agents from passing off or attempting to pass off any medicinal preparation (for the cure of deafness, &c.) not of the manufacture of the plaintiff as or for the goods of the plaintiff by the use of the word "Earaline," or by the use of any device or by advertisement, or otherwise, and ordered the defendant to pay to the plaintiff his costs of the action, the plaintiff accepting the damages paid into court by the defendant.

FAILURES AND BANKRUPTCY REPORTS.

Re JOHN HENRY ATHERTON, Wigan, Chemist and Druggist.

THE creditors on this estate met on August 2, at the County Court Offices, Wigan, Mr. T. H. Winder, the Official Receiver, presiding. The Official Receiver stated that the debtor had put down the fittings and fixtures, and the value of the shop as a going concern, at 800*l*. He had advertised the business as a going concern, and Mr. Ward, of Johnson Street, Montague Street, Blackburn, had offered 370*l*. for it, "all establishment charges to be paid, and the money to be paid down." The debtor (who was represented by Mr. J. France, jun.) did not make any offer. Mr. Samuel Graham, accountant, &c., King Street, Wigan, was appointed trustee, with Messrs. O. Rushton, T. Berry, W. Roger, J. F. Ashton, and J. McClure, as a committee of inspection.

Re H. B. DIXON, Hanley, Wholesale and Retail Chemist.

ON August 3, at the Hanley County Court, Mr. A. P. Llewellyn made an application to his Honour Judge Jordan in the matter of the bankruptcy of Henry Benjamin Dixon, lately carrying on business as a wholesale and retail chemist, at Hanley, to approve a composition of 6*s*. 8*d*. in the pound. Mr. Llewellyn explained that it was proposed to pay the composition by three instalments, at the end of two, four, and six months respectively. He (Mr. Llewellyn) had undertaken to see the first instalment paid, and the second and third instalments had been guaranteed by two persons approved by the trustee in bankruptcy (Mr. P. H. Pope). The creditors were willing to accept the composition, and it was therefore urged that an order should be made annulling the bankruptcy and revesting the estate in the bankrupt. If the estate were realised in bankruptcy, the creditors would only receive about 2*s*. 6*d*. in the pound. Mr. T. Slaney (Newcastle-under-Lyme), who appeared for the trustee, said that Mr. Pope approved of the scheme, and offered no objection to the adoption of the course suggested. His Honour said that the bankrupt's liabilities were about 1,400*l*., and the assets had been estimated to produce 747*l*.; but this they had not done. The report of the Official Receiver showed that beyond not keeping proper books of account, and trading after he knew himself to be insolvent, the conduct of the bankrupt had not been at all reprehensible. He thought the proposed composition would be for the best interests of the creditors, and therefore he should make an order approving it, annulling the bankruptcy, and revesting the estate in the bankrupt.

Re C. J. SHACKLETON, Mill Hill, Derby, Chemical Manufacturer.

THE public examination of this debtor, who had been carrying on business at Madeley, was held at the County Court, before Mr. Registrar Potts, on August 1. The statement showed a total liability of 4,019*l*. 5*s*. 10*d*., and assets estimated to realise 1,000*l*. 11*s*. 1*d*.. According to the Official Receiver's report, the alleged cause of failure was stated to be a combination of railway companies prohibiting the carriage of certain chemicals, and the condition of affairs when the debtor was induced to enter the business. The debtor, Charles James Shackleton, residing at Mill Hill, Derby, in January, 1886, agreed to take over the assets and liabilities of the concern from the then owner (a Mr. Brocksop), who is a relative, on the basis of a balance-sheet prepared at that date, such transfer involving no payment by the debtor beyond the writing off a cash loan of 150*l*. due to him from the vendor, who remained as manager of the business. The debtor appeared to have put into the business a further capital of about 250*l*. The manufacturing premises, with land and cottages, were estimated at 2,437*l*., and these, together with certain life policies valued at 170*l*., were charged to secure a first mortgage of 1,332*l*. executed by Brocksop (subject to a prior charge of 80*l*.), and transferred to the debtor on the sale of the chemical works, and also a second mortgage executed in July, 1886, to partly secure the sum of 1,455*l*. 15*s*. 9*d*. stated to be owing to the debtor's father, thus leaving a deficiency on the second mortgage of 231*l*. The father is also returned as an unsecured creditor for 654*l*., and there were other family claims amounting to 230*l*. The overdrawn banking account of 1,400*l*. was partly secured to the extent of 100*l*., and there was also collateral security. Accommodation bills amounting to 981*l*. were current or unpaid, and rank against the estate. From the examination of the debtor by Mr. Sudbury (the Official Receiver), Mr. Clarke, and Mr. Stone, he had taken over certain mortgages previously executed by Brocksop, and had executed a second mortgage in favour of his father to partly secure a sum of 1,455*l*. 15*s*. 9*d*. owing to the latter. From the examination of the debtor it appeared that the business had been left to the management of Brocksop, and that the bankrupt had no practical acquaintance with it. The bankrupt asserted that by misrepresentation he took the concern over on unfavourable terms, and to that fact he owed his failure. The inquiry was adjourned.

Re HENRY D'ARCY POWER, 133 Rye Lane, Peckham; 1 Victoria Road, Choumert Road, Peckham; and The Laurels, East Dulwich Road, Physician.

THIS bankrupt applied to Mr. Registrar Hazlitt, on Thursday, at the London Bankruptcy Court, for his order of discharge. A receiving order was made against the debtor's estate in March last on a creditor's petition. The Official Receiver's report stated that the bankrupt submitted a statement of his affairs in April showing liabilities amounting to 664*l*. 16*s*. 10*d*. and assets estimated to realise 69*l*. 0*s*. 10*d*. Proofs were sent in for claims to the amount of 648*l*. 13*s*. 6*d*., and the Official Receiver estimated that the assets would only realise 48*l*. 19*s*. 6*d*. At the public examination the bankrupt stated that from 1880 to 1882 he was managing director of a company at a salary of 300*l*. a year, and held also 800*l*. of ordinary shares in the company; that in 1882 his company became amalgamated with another, and his services were dispensed with, while the purchase-money paid to his company was only sufficient to discharge the debentures, and his ordinary shares consequently proved to be valueless. He also stated that upon leaving the company he resumed and completed his medical studies, and since September, 1884, has been practising as a surgeon; further, that some time since an action was brought against him for alleged malpractices; that he gained the action, but never recovered his costs. He attributes his failure to the loss of his salary as director, and to the law expenses of the above-mentioned action, and further states that when his salary ceased he owed about 200*l*., and had been constantly pursued by those debts since. No offences were charged against the bankrupt, and, there being no opposition, the learned Registrar granted an immediate discharge.

Re BYRON BLEWITT, 120 Leadenhall Street, and
73 Adelaide Road, Hampstead, Surgeon.

THIS debtor applied to Mr. Registrar Giffard on Wednesday 1st, at a sitting at the Bankruptcy Court, for his order of discharge. Mr. Aldridge appeared for the Official Receiver, Mr. Herbert Reed for the trustee, and Mr. Yate Lee supported the application on behalf of the bankrupt. The Official Receiver's report was read, and it appeared therefrom that the receiving order was made on the debtor's own petition on June 4, 1886, and the debtor filed a statement showing liabilities of 2,317*l.* 14*s.* 4*d.*, and assets valued at 653*l.* 10*s.* 1*d.*, after deducting preferential claims amounting to 43*l.* 13*s.* 10*d.* were made for 2,106*l.* 9*s.* 2*d.*, and the trustee estimated that assets would realise 336*l.* 8*s.* The first meeting of creditors was held on July 5, 1886, when the debtor was adjudged bankrupt, and Mr. J. W. Woodthorpe was appointed trustee with a committee of inspection. At the public examination held in the following November, the bankrupt stated that he began to practise as a surgeon in England in 1871. In 1879 he was adjudged bankrupt with liabilities of 3,925*l.* and assets 45*l.*, and obtained his discharge therefrom in August 1882. The present failure is attributed by the bankrupt to speculations on the Stock Exchange, the deficiency amount showing the amount of such losses to be 1,989*l.* 9*s.* The offences charged by the Official Receiver were that the bankrupt had brought about his failure by rash and hazardous speculations, and that he had on a previous occasion been adjudged bankrupt. Mr. Reed, in opposing the application, said the trustee complained that bankrupt had not assisted him in realising the estate, and that he had collected certain bank debts, and it became necessary to obtain an order of the Court directing the bankrupt to refund the amount so collected. He further stated he should have to examine the debtor upon various points. Mr. Yate Lee, on the bankrupt's behalf, pointed out that, owing to an attack made upon him about eighteen months ago, when his skull was broken in by a buckle-duster, the bankrupt was not in a state of health to be subjected to an examination. Mr. Reed thereupon stated he could examine witnesses instead; but that would necessitate an adjournment to enable him to have them brought before the Court, and it was decided by his Honour to adjourn the application until November 1 next.

EDWARD JONES, 59 Camberwell New Road, and 9 New Street, Kennington, Chemist.

A RECEIVING order was made against this debtor's estate on July 18 last, and accounts have now been issued from the department of the Official Receiver, which show unsecured creditors for 198*l.* 11*s.* 4*d.*, and preferential creditors, for rent annuities, 6*l.* 3*s.* 6*d.* The only asset returned is stock-in-trade, valued at 5*l.* The Official Receiver reports that the debtor states he filed a petition for liquidation in the Leicester County Court in 1881, under which a dividend of 3*s.* 2*d.* in the pound was paid, and he obtained a discharge. In November of that year he removed to London, and acted as assistant until June, 1886, when he agreed to purchase the business and stock, &c., from his employer for 150*l.*, in respect of which the present liabilities include a claim for 13*l.*, representing a judgment for balance of the purchase-money, costs, and rent paid. He attributed his failure to his trade and personal expenses having been in excess of his profits, in consequence of the trade having fallen off through competition and deterioration of the neighbourhood, and to legal expenses in defending an action. The lease of the business appears to have been sold, at Midsummer last, for 36*l.* and the amount devoted to paying rates, taxes, and legal costs, and the household furniture is said to have been seized and sold, under an execution, in December last, and is at present hired by the debtor's wife. The first meeting of creditors will be held at Carey Street, Lincoln's Inn, on August 14, and the debtor's public examination is fixed for September 6 next at the London Bankruptcy Court.

It is said that a new medical journal is to be published in September under the title of the *Illustrated Medical News*. Sir Murell Mackenzie, it is rumoured, will either be editor or leading contributor.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.O.

From the "*Trade Marks Journal*," August 1.

- "BEACON CURE"; for medicine. By E. J. Pensseney, 379 Albany Road, Camberwell. 69,787.
- "MASON'S POULTRY MEDICINES," and other wording on label; for poultry medicines. By R. C. Mason, High Street, Bromsgrove. 71,038.
- "ST. JACOBS OIL CONQUERS PAIN," and figure of the saint on label; for a medical preparation for veterinary and human use. By the Charles A. Voegeler Company, 45 Farringdon Road, E.C. 71,379-80.
- "BONNET'S UNRIVALLED EMBROCATION," initials, and figure of an ant; for embrocation. By J. C. Bonnet, 97 Wellington Street, Woolwich. 72,371.
- "CASCARADYNE," on block and signature; for a medicine. By T. O. Sandell, 1 Baron's Court Road, West Kensington. 72,973.
- "THE YORKSHIRE TIC AND TOOTHACHE REMEDY," on label; for pills for toothache. By E. M. Pratt, Manor Square, Otley. 72,988.
- "The A. D. C. 'DOLLAR' CORDIAL FOR CALVES," and other wording on label; for a medicine for calves. By the Aylesbury Dairy Company (Lim.), 31 St. Petersburg Place, Bayswater, W. 73,117.
- "DIABETIC JELLY," and other wording on label; for a jelly for medicinal purposes. By Batger & Co., 103 Broad Street, Ratcliff, E. 73,222.
- "SCRUTON'S COUGH CURE," on heraldic device; for a preparation for human use. By A. Oglesby, trading as Oscar Scruton & Co., 21 Cheapside, Barnsley. 73,269.
- Designation of depositor's motto, &c., on round label; for chemical substances, Class III. By Horner & Sons, Mitre Square, Aldgate, E.C. 73,523.
- Device (horse's head within a horseshoe); for hoof ointment. By J. C. Bonnet, 98 Rue de Maubeuge, Paris. 73,554.
- "R. FLETCHER'S ALBION OINTMENT," with device on label; for ointment. By R. Fletcher, 184 Oldham Road, Manchester. 73,835.
- "DR. HAIR'S ASTHMA CURE"; for a medicinal compound By J. W. Hair, Cincinnati, Ohio, U.S.A. 74,447.
- "STOTHERT'S STARCH ENAMEL"; for a laundry preparation. By T. Stothert, Station Road, Blackburn. 74,680.
- "REFINED LIPARI CRYSTAL LAVA PUMICE SOAP," and other wording on label; for pumice soap (perfumed). By James Alexander & Co. (trading as the Lambeth Pure Toilet Soap and Perfumery Works), 8 Paradise Street, Lambeth, S.E. 74,861.
- "HAGON'S FLUID HERBS," on block; for an extract of herbs for manufacturing herb beer. By A. Hagon, 39 Bridge Street, Cardiff. 75,276.
- "R. WILLETT & NEPHEW'S VEGETABLE ESSENCE OR RUBBING BOTTLE," on label; for an embrocation. By R. Willett & Nephew, Meltham. 75,330.
- "BONNEY'S DISINFECTANT FURNITURE POLISH," on label; for the same. By J. Bonney, 353-5 Harrow Road, Paddington. 75,413.
- "ALLISON'S LIFE BRIGADE REMEDIES," and device on label; for patent medicines. By J. C. Allison, 42 Thames Street, South Shields. 75,509.
- "SEQUAN'S PRAIRIE FLOWER," on figure of a bunch of flowers; for a patent medicine. By W. H. Hartley, 40 Farringdon Street, E.C. 75,527.

- MICROBENE" (crossed), and other wording on device; for a chemical substance. Also "Bacillium"; for disinfecting compounds. By the Coal Tar & Metallic Disinfectants Company, 14 St. Mary Axe, E.C. 75,533 and 76,702.
- "COOKE'S COSMO-CURATIVE PILLS," and other wording on label; for medicine. By F. H. Cooke, Coatham, Redcar. 75,671.
- "GOYA LILY," and figure of a flower on label; for perfumery. By Burroughs, Wellcome & Co., Snow Hill Buildings, E.C. 75,804.
- "ALLEN'S IMPROVED SHEEP DIPPING COMPOSITION"; for the same. By Elizabeth Allen and John Neale, trading as H. W. Allen and Neale, 55 High Street, King's Lynn. 75,914.
- HERALDIC design (shield with cross staves); for chemical substances. By W. J. Crook, 35 Eastcheap, E.C. 75,968.
- "CANNICIDE"; for an application for corns. By John Wakefield, trading as Bellamy & Wakefield, 1 Easy Row, Birmingham. 76,209.
- "THE 'ACME SACCHARUREAMETER'"; for an instrument for the estimation of urea and sugar in urine. By R. D. Gibbs and J. Cuxson, trading as Gibbs, Cuxson & Co., Wednesbury. 76,352.
- Figure of shield bearing designation of depositor; for medicine. By W. Clarke, 153 High Street, Stockton-on-Tees. 76,366.
- Figure of carel cross; for tooth powder and paste. By W. Wilson & Son, 34 English Street, Carlisle. 76,457.
- "PANILOID"; for chemical substances. By Oppenheimer Brothers, Sun Street, Finsbury Square, E.C. 77,074.
- From the "Trade Marks Journal," August 8, 1888.*
- "GINGER ALE," with picture of ginger on label, and signature. By L. W. Cade and E. Smith (trading as W. Cade & Co.), 15 Upper Parliament Street, Liverpool. 68,020.
- "T. F. BRISTOW & CO.'S GLYCERINE AND CUCUMBER SOAP," in block letter; for a perfumed toilet soap. By H. N. Bolton (trading as T. F. Bristow & Co.), St. James's Walk, Clerkenwell, E.C. 70,020.
- "HAMPTON COURT SAUCE," with picture of Hampton Court and signature on label. By Annie Qipton, Maple Road, Surbiton, Surrey. 72,334.
- "DERMOLAVE, the syrup of soap," on label; for a toilet preparation. By H. P. Truefitt (Limited), 13 & 14 Old Broad Street, London. 73,305.
- "HAYES' FOOD," with picture of hand holding balance; for a food for invalids. By J. T. Crosher (trading as Tebbutt & Co.), Melton Mowbray, Leicestershire. 73,402.
- Mineral waters, monogram in garter, with name "H. W. Steel, Oxford" By H. W. Steel, Worcester Place, Oxford. 74,969.
- "COOKE'S COSMO CURATIVE MIXTURE," and other wording, on label bearing signature; for a medicine. By F. H. Cooke, Coatham, Redcar. 75,670.
- Mineral and aerated waters, picture of ship's winch, with letters "R. S. & D. C." By R. S. & D. Crosthwaite, South Shields, Durham. 75,967.
- "NO NAME," and other wording, on label; for a perfume. By T. Clare & J. Clare (trading as Clare & Hunt), 1 Harcourt Place and 2 South Street, Scarborough.
- "EXPRESS," with picture of flying wheel; for mineral and aerated waters. By George Taylor, Trent Street, Attercliffe, Sheffield. 76,087.
- Curved diagram, with letters "K. T. D. & Co."; for a mineral substance called tincal for use in manufactures. By Dods, Ker & Co., 11 Albert Square, Manchester. 76,100.
- "MAW'S LENTICULAR THERMOMETER"; for clinical thermometers. By Maw, Son & Thompson, 7 to 12 Aldersgate Street, London. 76,167.
- "LOUVIMA"; for perfumed soap. By W. G. Parnell, 3 Craven Street, Strand, Middlesex. 76,283.
- Picture of boy driving goat cart, with "H. Gamble's Sauces and other wording; for sauces for puddings, &c. By H. Gamble, 1 Park Grove, Bromley, Kent. 76,417.
- "INVICTA," in block letter; for knife-powder and other articles for cleansing. By W. G. Nixey, 12 Soho Square, London. 76,438.
- "DARLINGTON'S FUMIGATING MIXTURE"; for an insecticide. By J. W. Darlington, 193 New Road, Chatham, Kent. 76,514.
- "CASCADA," in block letter; for chemical substances. By Allen & Hanburys, Plough Court, Lombard Street, London. 76,649.
- "MATCH FOR ALL," with drawing of two matches crossed; for mineral and aerated waters. By H. Hartley, Bradley Cottage, Appleton, Widnes, Lancashire. 76,660.
- Signature "A. F. Perkins" and "Southsea" in block letter; for mineral and aerated waters. By A. F. Perkins, Palmerston Road, Southsea, Hants. 76,814.
- Signature "Alfred Bird & Sons"; for vermin destroyers (76,899); ditto, for medicated articles (76,900); ditto, for mineral and aerated waters (76,903); and ditto, for violet powder, perfumery, &c. (76,905). By Alfred Bird & Sons, Devonshire Works, Birmingham.

Trade Notes.

THE directors of Barclay & Sons (Limited) have issued warrants for an interim dividend of 1s. 6d. per share on the ordinary shares.

LAST week, in referring to Messrs. Burroughs, Wellcome & Co.'s Anticonstipation Tabloids, we named alum $\frac{1}{2}$ grain as one of the constituents. This was a misprint for aloin.

MESSRS. SEABURY & JOHNSON, who are now in working order at 47 Farringdon Street, insert in this issue an announcement expressing their acknowledgment to Messrs. Hawkes, Somerville & Co., of Whittington Avenue, for the temporary assistance afforded them.

H. LAMPLOUGH & CO. (LIMITED).—At the adjourned general meeting of the shareholders of this concern the report of the committee appointed to investigate the affairs of the company was submitted. The committee stated that they had looked into the accounts of the company and the trade, and found that it was in a thoroughly sound condition. The committee had given special attention to the deposit of the money at Alexander Brown's bank at the time of his failure, and quite agreed in the independent investigation made by Mr. Lescher. Mr. Lamplough had agreed to take upon his own responsibility all the money in Mr. Brown's hands, and had given his bills to the company, and deposited fully-paid-up shares to guarantee the amount. The result of these negotiations would secure the company against any loss in consequence of the failure of Mr. Brown. The committee recommended the resignation of Mr. Eden, and suggested that certain alterations should be made in the trading and various accounts, that the number of directors be increased to five, and that various alterations should be made in the articles of association. The chairman then moved that, subject to the remarks contained in the report of the committee appointed to investigate the matter of the accounts, the report of the directors be adopted by the meeting. He added that the efforts of the committee had so far improved the prospects of the company that the shares were now quoted 35s. to 37s. 6d. The motion was carried, and Mr. Lamplough was complimented on the honourable manner in which he had met the shareholders. In the course of discussion shareholders remarked that the working expenses had increased, while the profits had fallen much below what had been stated in the prospectus. Mr. Lamplough, in reply, said no doubt the profits had fallen off on account of extreme competition. There was one concern (Eno's) which advertised largely; and, besides, many country chemists made their own pyretic saline, and represented it to be as good as Lamplough's. Mr. T. F. Lynch (Lynch & Co., Aldersgate Street) was appointed a director in place of Mr. Eden, but a motion to replace Mr. Gribbon as auditor by Mr. Lescher was not carried.

BRITISH MEDICAL ASSOCIATION.

ANNUAL MEETING IN GLASGOW.

THE fifty-sixth annual meeting of the British Medical Association commenced in Glasgow on Tuesday, and has continued throughout the week. Tuesday's weather was not at all favourable for a good commencement, there being a dizzling rain and a brisk wind on the forenoon, which were sufficient to prevent the members ascending Gilmore Hill until the evening, when the President-elect delivered his address; nevertheless, the corridors of the University presented a very animated appearance during the day, and on subsequent days the assemblage was such as to quite repay the local committee for the strenuous labours which they had made for the comfort of the members and the success of the meeting.

The first general meeting of members was held in the Butcher Hall at half-past eleven on Tuesday. The President, Dr. John T. Banks, Regius Professor of Physic in the University of Dublin, presided, and there was a large attendance. Amongst those who promised to be at this meeting—and most of them were present—were Sir Spencer Wells, Bart.; Sir Andrew Clark, Bart.; Dr. Clifford Allbutt, F.R.S., Leeds; Surgeon-General McLean, C.B.; Sir Wm. Aitken, M.D.; Dr. George Duffy, Dublin; Professor Crookshank, King's College, Dublin; Sir George H. Porter, M.D., Dublin; Dr. George Sage, London; Dr. Edward Waters, Chester; Mr. C. G. Welhouse, Leeds; Dr. Apostoli, Paris; Dr. A. Jacobi, New York; Professor von Rorke, Munich; Dr. Ziemssen, Wiesbaden; Professor Sir George McLeod, Dr. Cameron, M.P., Dr. Farquharson, M.P., &c.

Professor BANKS, in opening the proceedings, congratulated the members on the increased success of the Association, specially referring to the fact that since last meeting the membership has increased from 11,000 to nearly 13,000, and the increased healthiness of the branches in all parts of the world. In concluding he congratulated members upon the choice of the distinguished gentleman who was to succeed him in the chair, and introduced Professor Gairdner, who in taking the chair briefly returned thanks.

I. Cameron, M.P., moved, and Sir George Macleod seconded, a vote of thanks to Professor Banks, which was acknowledged.

ANNUAL REPORTS.

I. THOMAS BRIDGWATER, Harrow-on-the-Hill, moved the adoption of the annual report, which recorded the formation and recognition of branches in Ceylon, Nova Scotia, Perthshire, and South Africa. The whole of the United Kingdom, and indeed, the entire Empire, is now apportioned out into branches. The number of members on the register last year was 11,107; during the year 359 had resigned, 132 had died and 1,649 new members had been elected, leaving the present number 12,265. The revenue amounted to a total of 28,044. 0s. 3d., the expenditure to 26,060. 17s. 8d., leaving a surplus balance of 2,619. 2s. 7d.

His report and the financial report submitted by Dr. Conantaine were both adopted.

The report of the Parliamentary Bills Committee was then submitted, and its adoption moved by Mr. Ernest Hart, chairman of the committee. The report dealt at considerable length with the question of relative rank of army medical officers, Irish Lunacy Laws, the Lunacy Acts Amendment Bill, the Local Government Bill, more especially in relation to the clause affecting medical officers of health, and other Bills, amongst them being the Pharmacy Bill, regarding which the committee reported that:—

In the Bill of 1837 there were certain provisions which indicated, it was thought, a tendency to encroach on medical rights, especially by including materia medica among the courses of instruction and examination. The committee authorised the Chairman to address communications to the Privy Council and to the General Medical Council on this subject. The General Medical Council adopted the views brought before them, and the President of the Council, Mr. Marshall, and Dr. Quain, on behalf of that body, had an interview with the President of the Privy Council. The Bill of 1883 has, the committee were glad to report, been expressly modified to meet the views which they have put forward on the subject, and now contains nothing which is in any way objectionable.

Mr. Hart's motion for the adoption of the report was

seconded by Dr. Farquharson, M.P., and Surgeon-Major Ince and Dr. FitzPatrick, of Liverpool, commented upon it, the former expressing the opinion that medical officers of health were not of much good; few of them understood anything about hygienic laws. ("No," and laughter.) "Why, this was the fad of the age. (Laughter.) It was the mania of present-time sanitarians." (Laughter.) As to the rank in the Army Medical Department, he considered that it depended altogether upon ability, and if a man could not rise above the ordinary position he was not worth the price of his lancet. (Laughter and applause.)

The report of the Inebriates' Legislation Committee was also adopted, as was also the report of the Scientific Investigations Committee, which contained particulars regarding the progress of investigations made by the various gentlemen who had received grants in aid from the committee. In moving the adoption of the report of the Collective Investigations Committee, Dr. Alfred Carpenter, Croydon, said that that would probably be the last report of that committee. They felt that they were endeavouring to cover too much ground, and obtaining information at a time when members of the Association were not likely to adopt suggestions made. Reports would therefore only be continued until the work on hand was complete.

After some further business the meeting adjourned until 8.30 p.m., when Professor Gairdner delivered

THE PRESIDENTIAL ADDRESS.

After some personal remarks, and a very brief history of the city in which the Association had assembled, Professor Gairdner discussed at some length the topic of "The physician as naturalist." This title, he said, recalled the time when the healer of the sick was regarded as in a very special if not exclusive sense a student of nature. He set himself to inquire how the idea represented in the word *physic* came first into exercise, and how it got floated into such a degree of popularity as not only to have practically displaced to a considerable extent in our own language the much older one of *medicine*—that is, *healing*—as applied to the art itself, but to have got itself into currency as applied to the very tools of the art, the drugs with which the physician, so called, was supposed mainly to work his cures. It is surely a very marked instance of what the late Archbishop Trench called the degeneration of words that in the course of ages all that nasty stuff which the Doctor Slops of the past made it a duty to send remorselessly down the throats of the lieges, whether in the form of pill, powder, or potion, should have got itself called by the name of *physic*—that is Nature's remedies; while it is the very irony of historical fate that this word, in this sense of it, should now be current in these islands only. The Professor went on to sketch the history of the healing art from the time of Hippocrates downwards, arguing that the earliest tradition demanded that the healer or physician of the highest class ought also to be, in a very real sense of the word, a naturalist, or perhaps a man of science (physical science being, of course, understood); that it is his prerogative to be trained and exercised after the best manner and according to the most thorough discipline of the science of his age; and that he ought to be (or, at least, that he has been in very remote times) regarded as being admirable and trustworthy as a healer or physician, chiefly in proportion to the confidence reposed in him as a naturalist—that is, a humble, reverent, and exact follower and student of nature. Surgeons, apothecaries, monks, and empirics had at one time threatened to wipe out the physician altogether, but the study of nature as a basis for the training of the physician was again asserting itself.

When we consider, the President continued, how completely modern science has demonstrated the subordination of living bodies and physiological processes, not to a wholly detached set of laws termed vital, but to all the most elementary laws of matter; and, further, the correlation of all the physical forces throughout the universe, so that the living body and its environment act and react on each other throughout infinite space and time, it will be readily admitted, I think, that some kind of systematised instruction in physics, and not a mere elementary examination in mechanics, should be an essential part of an education with a view to the medical profession. And when we further consider that most of the great advances in medical diagnosis in the present day, through the stethoscope, microscope,

laryngoscope, ophthalmoscope, sphygmograph, electricity as applied to muscle and nerve, &c., involve applications of pure physics which are neither remote from practice nor yet very easily mastered by the beginner; and that, in the case of electricity and other physical reagents, even heat and cold, &c., we are every day extending the domain of these sciences in therapeutics, and still more perhaps in preventive medicine and sanitary science, their claim for an extended recognition in teaching seems to be enormously enhanced.

After pronouncing a warm eulogy on the life and work and character of Darwin, the Professor branched into theological matters, urging that it was a high part of the physician's duties to assist in the reconstruction of faith free from the pernicious despotism of dead orthodoxies.

In connection with the meeting there was on this, as on previous occasions, an

ANNUAL MUSEUM.

This is the professional title for an exhibition which is one of the most attractive features of the annual gathering, and it must be said at the outset that the Glasgow "Museum" surpasses many of its predecessors in variety and excellence of the exhibits. Taking them in the order that we find them in the catalogue, we come first to section A, comprising

Foods and Drugs.

Allen & Hanburys, Plough Court, E.C., have an important exhibit in the examination hall, which comprises most of the preparations, such as Byno-pancreatin and Byno-pepsin, which the firm have popularised during the past few years, and in addition thereto they exhibit a number of novelties which attracted considerable attention. "Cascada" is the name under which the firm introduce tasteless preparations of cascara sagrada, a palatable Cascada wine being the form which we believe will be much run after, as it is sufficiently weak and pleasant to be taken as a table wine, and yet so active that prescribers and patients alike will recognise its value. This may be said to be the novelty which received most attention at this stand, but the "soluble" pills (a branch which the firm are just going into on a large scale), glass capsules of various volatile remedies, and several new granular effervescent preparations were not less noteworthy parts of the imposing exhibit.

Anderson & Adams, Dublin, exhibited Maxwell's chloride of ammonium inhaler, which is not more than a fortnight old. This is simply a wide glass tube with an inhaling tube at one end, and provision on one side for admitting crystallised ammonium chloride. This on being heated by a spirit lamp placed below is converted into perfectly neutral and anhydrous vapour. This is undoubtedly a step in advance, but the inhaler is apt to give off too much of the vapour, and this is not pleasant.

The Apollinaris Company (Limited) occupy one of the best stands in the examination hall with a well-arranged collection of Apollinaris, Friedrichshall, and Hunyadi-Janos waters; and Armbricht Nelson & Co., of 2 Duke Street, Grosvenor Square, W., were in evidence with the different varieties of their coca wine, which medical men appear to be very fond of sampling as well as prescribing—if we may judge by the brisk business which went on at this stand.

Brand & Co., 11 Stanhope Street, Mayfair, exhibited their well-known dietetic specialties for invalids, to which they have recently added several highly nutritious concentrated broths, of which veal, mutton, chicken, and game form the basis. Beef bouillon is another recent introduction by this firm, and its cheapness is likely to assist in making its good qualities known. The whole exhibit was very attractive and well attended to.

F. Bayer & Co., of Elberfeld, exhibit phenacetin and sulphonal.

Burroughs, Wellcome & Co., as hitherto, represented not only themselves, but many other firms, such as Bishop & Sons, Benno-Jaffe & Darmstadter, Fairchild Brothers & Foster, Fellows' Manufacturing Company, &c., and their half-dozen attendants appeared to be constantly employed in describing the exhibits to visitors. In addition to elixoids, hypodermic tabloids, ordinary tabloids, valoid fluid extracts, and tabloid triturates, the artistically arranged stand contained samples of the manufactures of the firms named, and a general selection of surgical and therapeutical novelties. Thus there was salol in various forms, as well as sulphonal,

and zymised suppositories (with cacao butter basis) for rectal alimentation. Lawton's absorbent cotton and a new paper-fibre lint for dentists' use (it is an excellent water-absorber) represented one class of goods, while the combined properties of lanoline and hazeline were illustrated in a new ointment of these substances which the firm have just introduced, and which Dr. Ward Cousin proposes to use in the treatment of hæmorrhoids, the ointment being introduced by means of an instrument which he has specially designed for the purpose. Medicine-cases formed a goodly part of the exhibit, these ranging in all sizes from the tiny cigarette-case of tabloid triturates to the Livingstone medicine-chest, containing a full assortment of medicines for treatment of the diseases incident to tropical climates. The firm were lavish in the distribution of specimens of their products, and the accessories which they threw in included a photographic souvenir of Glasgow and the Association meeting, and copies of the prescription-book which was referred to a few weeks ago. Their prescription-writing desk occupied a commanding position on the top of the staircase, where it was closely examined.

The Chemical Carbon Company, of 62 Holborn Viaduct, E.C., exhibited in the marquee in the grounds, wherein sanitary appliances generally were collected, a very complete series of the vapour cones which they have recently introduced. These are hollow cones of carbon mixture (such as fumigating pastilles are made of) containing in the "hollow" a glass vessel or material which it is desired to vaporise. On lighting the apex of the cone the seal of the glass vessel is melted, and the contents are slowly vaporised. The idea is exceedingly ingenious, and the manufacturers have enhanced the value of their ingenuity by producing a great variety of cones for perfuming, fumigating, disinfecting, and medicinal purposes. It is evident that the applications to which these cones may be put are very varied, and as the vapours are in all cases slowly and regularly produced, there is no fear of suffocation with those of the more potent character (bromine and sulphurous acid, for example). The combinations as a whole have been well selected, regard being paid more especially to the atmospheric requirements of patients suffering from pulmonary affections.

Thos. Christy & Co., of Lime Street, E.C., were in evidence with an imposing exhibit which contains fewer crude materials than we remember to have seen in any of their previous exhibits; fluid extracts (or other suitable preparations) of new vegetable remedies formed, indeed, the principal part of their exhibit, and we take it that this indicates a departure on the part of the firm which is destined to add to their reputation. The oddities of materia medica were not wanting, however; there was erythrophloeine in beautiful white crystals—an ounce, or thereabouts—sufficient evidence that there is something in kava poison—and a collection of varieties of strophanthus seeds, which the catalogue increased in number by informing us that they included "konabe," "glabious of Gaboon," and "woolly of East Coast." On behalf of Mr. Trommsdorff the firm exhibited a series of metallic salts of soziodol, and specimens of strophanthin and pure aconite; for Messrs. Howards & Sons, of Stratford, they exhibited beautifully crystalline caffeine, the first made in this country from denatured tea; and for Lloyd Bros., of Cincinnati, they exhibited eclectic resinoids. We were shown the latest combination of Chaulmugra oil, in which the presence of wool fat materially assists the absorption of the oil, a matter otherwise of considerable difficulty.

Corbyn, Stacey & Co. occupied a very large space with an exhibit of drugs and preparations illustrative of the 24th edition of "Notes" on remedies of recent introduction. Amongst the latest of their novelties are lozenges, each one of which represents 30 grains of compound liquorice powder, and an elixir and effervescent preparation of antipyrin—the latter at present somewhat run after by medical men, and shown by most of the exhibitors in the museum. Dahl's Agency exhibited their dyspepsia cakes, and Denaeyer's Peptonics Company (Limited), 118 Bishopsgate Street, E.C., showed their sterilised preparations.

Evans, Sons & Co. and their associate firms made an attractive, though small, show of fluid extracts, suppositories, liquors, effervescent preparations, and various other Pharmacopœial preparations. There were also shown specimens of ointments made five years ago with fossiline, which do not yet show evidence of change. To these we may add speci-

nens of rare drugs and a complete assortment of Montserrat lime-fruit juice and its preparations, which occupied a separate stand. The case on which the firm showed their Pharmacopœial preparations was a good specimen of cabinet work, such as they produce in their sphere as shop-fitters.

Ferris, Boorne, Townsend & Boucher had two exhibits, one comprising a gruesome assortment of surgical instruments, and the other a more pleasant to look upon selection of their pharmaceutical products. The latter were representative of the medicaments which form the subject of "Pocket Therapeutic Notes," a handsome booklet which the firm have recently published as a guide to medical men. Apart from the universal medicines therein mentioned, we noticed in the exhibit such preparations as transparent chlorodyne (amber coloured and soluble), mist. bismuthi co. aromat., syr. hypophos. comp., and granular effervescent anti-pyrin. The firm's cascara speciality is a chocolate—quite a pleasant way of taking the aperient.

C. Green & Co., Tower Chambers, Moorgate Street, E.C., exhibited several of the better-known liquors as well as hypodermic solutions of some forty different kinds, the peculiarity of which is that they remain permanently bright and unaltered even after reasonable exposure. For the injection of these they offered a special syringe with several tubes of the more frequently used solutions in a single case.

C. J. Hewlett & Sons showed in an upright case many of their pharmaceutical preparations, several of which have become so popular as to be universally imitated. Amongst those which do not seem to be so well known is ung. hæmatoxyli o., in which tolu, balsam, and logwood are excellently combined to form an ointment of agreeable odour, which has been found of great service as an astringent application to cancerous surfaces. The miscible liquid extract of cinchona made by this firm is also a preparation worthy of note.

Adjacent to Messrs. Armbricht Nelson & Co.'s exhibit Messrs. Simon Henderson & Sons show their "Perfect food biscuits" and "Wheatina biscuits." These biscuits are made from a flour manufactured so as to eliminate the indigestible and useless bran and retain all the nutritive value of the wheat. In the case of the "Perfect food biscuits," the process for the making of which is the subject of a patent, the manufacturers have carried out the happy idea of adding sufficient gluten to make up for the deficiency in this in the wheat, so as to have the constituents of the biscuits in the proportions necessary to maintain the body in health. They constitute, in fact, an ideal dietary. They promise to be a distinct and valuable addition to the food resources of those who have occasionally to do long spells of work without having time for regular meals.

Hockin, Wilson & Co.'s "soluble" preparations of podophyllin were not seen to so much advantage in the museum as should have been the case.

Ingram & Royle showed, in conjunction with the Glasgow Apothecaries Company, about a dozen of the mineral waters for which they are agents in this country, and the exhibit was well arranged and attractive.

King & Co. (Limited) showed in a very artistic fashion an assortment of Edwards's desiccated soups, in which medical men took great interest.

Loeflund & Co.'s stand contained the malt and milk preparations which they have exhibited on previous occasions, and a new preparation, "Alpine milk biscuits," in powder form. This is a children's food, of which milk solids to the extent of 25 per cent. and wheaten flour are the bases. The food is very nutritious and easy of digestion, having already undergone to a certain degree such modification as will assist in digestion.

Lorimer & Co. occupy an immense stretch of counter space with their specialities, the more important of which are fluor cascara sagrada dulcis, which is palatable and free from bitterness; liq. opii dialysatus, in which the morphine exists as the natural salt; Lorimer's hypophosphites, cocaine, and other preparations of coca. It is difficult to say what this firm does not manufacture in the way of pharmaceutical preparations, and there is not a popular craze or new departure which they do not endeavour to take advantage of. For example, they exhibited flexible capsules alongside elegant pearl-coated pills, and these were cheek by jowl with compressed pellets, and these with medicated lozenges. Concentrated liquors for the preparation of syrups, &c., were prominent, and the iodised "oil" which has lately been

attracting attention, and for which they are the agents, was also shown. This "oil" (we purposely quote the word) is not in the strict sense of the term an oil, but an aqueous fluid of oily consistence, which mixes readily with water, and may even be mixed with oil. Various statements have been made regarding the preparation in medical journals, as well as by the manufacturers, chiefly regarding the percentage of pure iodine in the "oil." We are unable to confirm these statements so far as free iodine is concerned, the preparation containing a mere trace of it, the metalloiod existing as an alkaline iodide. The chief value of the preparation lies in the fact that it is an excellent liquid substitute for lin. potass. iodidi cum sapone, and being unalterable it may in many cases be preferred to that preparation.

John McMillan, Glasgow, had an exhibit of pharmaceutical preparations (chiefly of a kind ready for dispensing) which attracted considerable attention from the fact that the stand was curtained with Milne's antiseptic dressings. The exhibit as a whole was an exceedingly creditable one, and the preparations showed evidence of being made with great care.

Henri Nestlé, of 9 Snow Hill, E.C., exhibited infants' food and condensed milk; and Mr. D. Nithsdale, Perth, showed cod-liver oil chocolate cakes, each containing a large teaspoonful of the oil, yet the chocolate is eatable. Oppenheimer Brothers exhibited their liquor specialities, euonymin and pepsin liquors particularly.

John Richardson & Co., Leicester, had an exceedingly attractive exhibit at the head of the staircase leading to the examination hall. In this coated pills and portable medicine cases containing pills were prominent; but the preparations travelled well over the whole range of galenical products, such articles as U.S. Pharmacopœia liquid extracts being included, and it may be said that all showed care in manufacture. Attraction was added to the exhibit by the presence of a new dispensing cabinet for medical men. In a surface space of 4 feet 2 inches the designers have succeeded in supplying physicians who dispense their own prescriptions with 112 bottles of medicines, 18 pill bottles, and 13 ointment bottles. In addition to these there are many drawers, and room for scales, mortars, bottles, labels, and other dispensing requisites—verily a *multum in parvo*.

James Robertson & Co., 35 George Street, Edinburgh, whose flexible capsules were recently the subject of favourable comment in this journal, showed these and their gelatine-coated pills, as well as several other pharmaceutical preparations, including granular effervescing preparations and syrups, amongst the latter being a syrup of the hydriodates of iron, quinine, and strychnine, in which the alkaloidal iodides are so combined that precipitation is avoided. Robinson & Sons, of Chesterfield, exhibited a wonderful variety of lints, cotton wools, and bandages, as well as Gamgee tissue of two kinds, one (invented by Mr. Gamgee only a few weeks before his death) being perforated so as to absorb thick pus.

W. E. Sacker, 79 Fenchurch Street, exhibited compressed pellets and syrups, his stand including Schiefflin's products. A. de St. Dalmaz, Leicester, exhibited various kinds of plaster and wound pads. The Sanitary Wood Wool Company (Limited), of Hatton Garden, showed quite a large variety of Hartmann's products of wood wool which they manufacture. These are chiefly intended for surgical purposes or accouchements, and, as the material is remarkably absorbent and comparatively cheap, the uses of it are likely to increase. The wood wool is in some cases charged with mercuric chloride, the "sublimite lotiforms" (pledgets of wool and gauze) being a convenient form of carrying the antiseptic for use in preparing injections or lotions.

The Glasgow Apothecaries' Company exhibited a varied collection of drugs, chemicals and pharmaceutical preparations, and recess labelled bottles.

The Sanitas Company (Limited) exhibited their well-known preparations both in the marquee (wherein sanitary appliances were collected) and in the examination hall. Along with these "Nature's Hygiene" occupied a place.

Savory & Moore had one of the most interesting collections in the museum. Apart from the specialities (dietetic and pharmaceutical) with which their name is associated, they showed a very complete collection of surgical *impedimenta* supplied to the army and volunteer service, and a large number of medicine chests, including an exceedingly compact one supplied to the Khedive of Egypt. Parke's

chemical cabinet for the analysis of air, water, &c., was also shown, and in this department a speciality was made of standard volumetric solutions, test solutions, and all solutions and chemicals, as well as instruments required for urine analysis.

W. Schacht & Co., 26 Finsbury Pavement, E.C., exhibited Kronenquelle water, and several creditable pharmaceutical preparations, including dialysed ergotin for hypodermic use, and Dresche's solution of iron. G. & G. Stern made a somewhat imposing exhibit of pumiline essence and its combinations, and the Swiss Milk Company exhibited their powdered milk preparations in the marquee.

The Viking Food and Esseuce Company showed all their preparations of beef, to which they have lately added nutrient suppositories, each of which represents 3 oz. of peptonised beef-tea. Their exhibit was an attractive and well patronised one.

W. Warner & Co., through their agents, F. Newbery & Sons, exhibited their sugar-coated pills and other preparations. The exhibit stood close to the door of the examination hall, and being somewhat imposing, early caught the eye of the visitor and received attention. Amongst the preparations other than pills were bromo soda and bromo potassium.

Instruments.

Surgical and other instruments were exhibited in Section E, although, as has been already mentioned, some were to be found amongst food and drugs. Mr. Phillips, the junior partner of F. Darton & Co., attended with a varied collection of clinical thermometers, optical instruments, and constant current batteries for surgical use. The clinical thermometers, we observed, were varied as to size, and most of them were accompanied by Kew certificates, which showed that the indexes required no correction. In this department Godfrey & Cooke also exhibited their patent chloride of ammonium inhaler, which they have now adapted for use as an eye vapour-bath. For this purpose an eye-bath with hollow stem is attached to an indiarubber bellows, and by working the latter the vapour of the ammonium chloride is directed to the eye, upon which it is stated to have a soothing effect. Lynch & Co., of Aldersgate Street, appear for the first time at these gatherings with an astonishing variety of surgical instruments, which indicates how thoroughly the firm take up this branch of business. Their exhibit includes many important and expensive instruments which our space does not allow us to describe. Expense, however, was not the prevailing character of the collection, for we picked up such lots as a 2s. 6d. throat spray, a 2s. 6d. clinical thermometer in a nickel case, and a 2s. 6d. hypodermic syringe—all of them satisfactory articles. The firm have just introduced a seamless enema syringe with glass valve, of which we expect to hear more. In this section there are several excellent exhibits of microscopes, by Beck, Crouch, and others; and altogether the museum reflects great credit on those who have formed it.

PAPERS.

Amongst the papers read at the meeting was one by Mr. A. P. Luff, B.Sc., M.B., &c., Lecturer on Medical Jurisprudence and Toxicology at St. Mary's Hospital. In this paper Mr. Luff dealt with the subject of

THE PTOMAINES IN RELATION TO DISEASE.

In a similar paper contributed last session to the Chemists' Assistants' Association, the author referred more particularly to the chemical aspects of the subject, but on this occasion he took up the medical side of it. Assuming that many of the changes observed in the treatment of disease are due to chemical processes occurring within the body, Mr. Luff puts the question, Are we not proceeding in the right direction by endeavouring to ascertain (a) the causes that start those chemical processes; and (b) the actual products of those chemical processes and the properties of those products? If the treatment of disease resolves itself into a combat with definite chemical compounds, an accurate knowledge of the properties of which we have obtained, then the therapeutical treatment of disease will be based upon much surer and more definite principles than the treatment of complex vital processes of whose nature we have but a vague and uncertain knowledge. A brief reference to the properties of the ptomaines showed

that they have a potent influence in the creation and the symptoms of some diseases, and the elimination of analogous substances from the body gave a glimpse of known results due to the presence of foreign substances. The author, therefore, surmised that if we become acquainted with the ptomaines and their properties, then the discovery of antidotes that could render them insoluble or innocuous would lead us to the direct treatment of the infectious fevers, and would constitute a great advance in medical science.

In a paper on

SCABIES AND ITS TREATMENT,

By J. Brindley James, M.R.C.S.,

the author dealt summarily with one of the most frequent and most troublesome affections which daily cross the path and exercise the patience of the medical practitioner, especially in rural practice. Entering fully into practical details respecting the excellent system of rapid and thorough treatment pursued with such signal success at the celebrated cutaneous Hospital St. Louis, in Paris, and giving the favourite recipes advised by Cazenove, Dörbülneith, and others, he demonstrated with satisfactory clearness the readiness with which any village practitioner could with very little inconvenience organise a curative process on his own premises, successfully emulating the process which has worked so admirably at St. Louis.

A NEW REMEDY FOR HEART-DISEASE

was the subject of a paper contributed by Dr. Orlando Jones, of Harrogate. The remedy is *Cactus grandiflorus*, a native of Jamaica and Vera Cruz. A good description of this plant is given by Grim. Its flowers are remarkable, being very large, the calyx measuring about a foot in diameter. It is possible, Dr. Jones thinks, that other plants of this order may be equally valuable, as possessing properties that will control the heart's action, for Professor Robert Bentley states that the fruits of many species are useful in febrile diseases. Dr. Jones gave notes of cases in which the remedy had been used, and the results appeared to show that this remedy may be used as a substitute for digitalis when that remedy is inapplicable owing to its overstimulating action, and in cases of feeble heart. The final stage of the action of the drug is that it strengthens the heart, and consequently improves the circulation, so that the result of the exhibition of cactus is the reverse of that seen in digitalis.

THE BATH WATERS.

Dr. Douglas Kerr, of Bath, read a very interesting paper, in which he gave a short outline of the system of hydrotherapeutics practised at Bath, more especially in relation to the improved methods of bathing recently introduced, and spoke also of the advantages of thermal treatment in the case of patients recovering from acute rheumatism. From this paper it appears that bathing is carried on in Bath chiefly during the colder period of the year—the season beginning with September and ending with June. The Bath waters for medicinal purposes are applied both internally and externally. Internally the waters are alterative and tonic; they stimulate the secretions of the body, having a very marked effect upon the kidneys; they also improve the appetite and promote digestion. Externally the waters are used in baths and douches of every variety. The corporation are at present engaged in building a new suite of baths at a cost of 23,000*l*. This suite will contain every modern improvement in bathing, such as (1) massage douches on the Aix-les-Bains system; (2) local vapour bath; (3) steam bath; and (4) circular spray. When complete the baths will be amongst the most perfect in Europe.

Dr. R. B. Macpherson, of Cambuslang, contributed a paper on

THE WANT OF UNIFORMITY IN THE STRENGTH OF MEDICINAL SUBSTANCES.

The author first pointed out the importance of definite and uniform strength in official preparations. Though this principle is sufficiently recognised in the Pharmacopœia, he is strongly of opinion that in reality it is not attained to such a degree as it might be, and he holds with Dr. Whittle that "the indication at present is not for more new remedies, but for a better and more precise knowledge

of those already placed in our hands." This want of uniformity in strength does not apply so much to medicinal substances of definite chemical composition, though we know that these are largely subject to accidental impurities, adulterations, and deteriorations; but greater want of uniformity may be looked for in medicines derived from vegetable or animal sources. Pereira, Lauder Brunton, and Professor Bentley were quoted with regard to the natural variations in drugs, and the author regrets that more scientific care is bestowed upon the cultivation, collection, and preparation of drugs. As indicating the importance of care in the cultivation several interesting examples were cited of drugs which exhibit great variations in the proportions of active principle contained in them. In certain localities the poisonous properties of aconitum napellus are not developed, and it is so entirely innocuous that it is used as a potherb or even as "a pleasant tonic." The hemp plant grown in India is vastly more potent than that cultivated in Europe, the latter having little or no narcotic power; and even in India the plant grown in the mountains affords a resin not obtainable from that grown on the plains. The proportion of alkaloids in cinchona barks is liable to such great variation, that, according to Flückiger and Hanbury, it is impossible to state even approximately any constant percentage of alkaloids in any given bark, and De Vry found it to vary in C. officinalis from 11.96 per cent. down to less than 1 per cent. The great variations in activity of the hyscymus and digitalis leaves of commerce were mentioned, at several examples quoted illustrating the possible variations in the qualities of drugs due to substitutions or adulterations. The investigation carried out by Mr. Seaton and Mr. Otto Hehner was next referred to, in which out of fifty prescriptions sent out to various shops in the parish of Olsea no fewer than seventeen were incorrectly dispensed, though none were scheduled as incorrect if the chief constituents proved to be within 10 per cent. of the amount ordered. In one case the amount of the drug supplied was less by 85 per cent., and in another 57 per cent. more than that ordered. The author thinks such wide divergences more probably due to variations in drugs or preparations than to mere inaccuracies in weighing or measuring or to general carelessness in dispensing. The author's own investigation of a number of official preparations of active drugs, including aconite, digitalis, opium, nux vomica, and belladonna was then detailed. The marked differences in the proportion of active principle present in the different specimens leads him to the conclusion that these preparations are highly unsatisfactory, and that the question of the possibility of rendering the preparations of active drugs of more certain and uniform strength is one entitled to serious consideration. In conclusion, he makes the following suggestions:—(1) That all preparations of active drugs should be standardised, as has already been done in the case of nux vomica. (2) That official inspectors and analysts of drugs should be established, whose duty it should be to see that drugs and chemicals used in medicine are of sufficient purity, and that the standard preparations are really what they pretend to be. Such supervision by the State would be much more legitimate and worthy than the present system, by which a Government stamp affixed to some worthless or hurtful secret remedy conveys a false impression of its value to an ignorant public. (3) That individually medical men should take a closer interest in the dispensing of their prescriptions, seeing that they are made up by good houses. Dispensing by doctors, though in many cases a necessity, was deprecated, and the education of the public by the profession was advocated, so that they may learn to avoid "co-operative" and "cheap drug stores," and may come to recognise in the pharmacist not an ordinary tradesman but a scientific worker, for whose knowledge, experience, and care they should be ready to pay with no grudging hand.

A DOCTOR always finds that there's money in his coughers.

One of the latest uses of saccharin is as an addition to whisky in place of liqueurs. A $\frac{1}{4}$ oz. suffices for a hogshhead of hisky, and it is said that it immediately increases the value of the article by exerting a maturing influence upon the spirits. It is certain, at least, that it mellows the flavour of the spirits considerably.

BRITISH AND FOREIGN CONSULS' REPORTS.

ROUMANIA.

Drugs and Chemicals. The imports of drugs, chemicals, and dry-salleries into Roumania during the years 1886 and 1887 have been as follows:—

	1886		1887	
	Tons	£	Tons	£
Vegetable essences and drugs ..	1572	57,177	1,999	72,772
Pertumery	37	9,300	29	6,988
Chemical products	3,476	125,378	2,237	148,591
Dyes, varnish, &c.	1,177	57,337	1,708	73,061
Oil, tallow, wax, &c.	2,830	140,203	2,358	104,770

TURKEY IN ASIA.

Cutting Prices and Famine.

Competition is so sharp among the native firms that there is a continual tendency to substitute an inferior and cheaper class of goods for those now in vogue, and no sooner is an article imported which is found to obtain a ready sale, than hosts of competitors introduce goods of similar patterns or kinds but of inferior quality, and therefore cheaper. The merchants cut each other's throats, with the result that profits are infinitesimal, and that in many cases formerly lucrative branches of trade are abandoned. During the past year there was an absolute famine in Cilicia and the south of Asia Minor generally, owing to drought. The poverty engendered by the famine caused 60 per cent. diminution in the imports of European goods into Anatolia, and, as that district is chiefly supplied with this class of goods from Beyrout, the disaster affected Beyrout merchants and the total of imports most seriously.

Bribery and Corruption.

No consular report from the Turkish Empire is complete without a reference to the bribery, corruption, and incompetence prevailing in official circles, and it is therefore not surprising to hear that the import trade is seriously affected by the system of valuation of goods which now obtains in the Custom-house for the levying of the *ad valorem* import duty. This system has been in vogue since the expiration of the commercial treaty with Turkey in 1884. Previously the *ad valorem* duty was paid according to tariff; now every bale and package has to be opened, and its contents completely unpacked and estimated, a system which puts a premium on dishonesty. The officials place every kind of difficulty in the way of the merchants retiring their goods, and payment by valuation gives them every opportunity they can possibly want. They cause endless delays, they estimate at double or treble values, they refuse to accept invoices; and finally, in the absence of a bribe, the whole business is gone through again, until at length the merchants are invariably compelled to comply with their demands in sheer self-defence. Complaint is useless, as the employes know their power, and he who complained would rue it in the future. It may be said that, however great the Custom-house difficulties may be, they will not affect the volume of trade, as the market will always be supplied. But as a matter of fact they do. Merchants refuse to take risks under these circumstances, either as regards the quantity or the quality of the goods they bring out. They will not import more goods than they are sure of selling, and many of the more valuable kinds of merchandise they abstain from ordering altogether, as the loss by theft and damage sustained in the Custom-house is so great that they cannot realise a profit. The chief losers are the manufacturers in the exporting countries, and British trade certainly suffers a serious diminution from this cause.

Liquorice Trade Dying.

The liquorice trade has completely died out as far as the Acre district is concerned, the exports in 1887 being too small to be worth mention. The cause of this is the heavy fall in the price of the article in America. About 8,000 tons were exported from Beyrout and Tripoli, but the business is no longer profitable.

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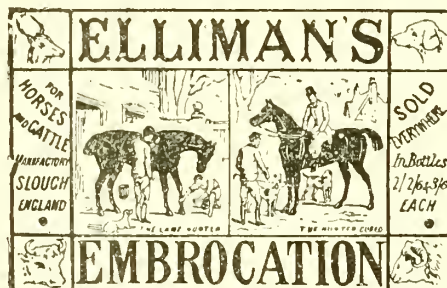
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EDITORIAL NOTES.

A GERMAN PHARMACEUTICAL INVASION.

A NEW alarm was offered for chemists' consumption by the letter we published last week over the signature "Quod Erat Demonstrandum." Our correspondent, it must be admitted, made the most of his materials. Basing his remarks on the recent decision of the Pharmaceutical Council in a particular case to accept evidence of having passed German examinations in lieu of the home Preliminary, "Q. E. D." raised before us the terrible bogey of a German pharmaceutical invasion, corresponding in its character and effects with the competition from the Fatherland which has played havoc among the employes in other branches of commerce. The writer of the letter was evidently himself conversant with German pharmacy as well as with German education, and the London correspondent of the *Pharmaceutische Zeitung*, who replies to him this week, certainly fails to prove that our correspondent was "ill informed," as he asserts. "Q. E. D." showed forcibly that there is practical danger to the public in accepting these German certificates of general education, chiefly because we cannot be assured that our future Apotheker-chemist will be sound enough in his English to properly supply the needs of British customers. This danger is not altogether a fanciful one. The German who has been excused his "Preliminary" may straightway submit himself for the qualifying examination. He must produce a certificate of three years' service in the translation and dispensing of prescriptions, but that certificate need not be an English one, nor need the translation have been from Latin into English. Then, again, notwithstanding our abounding respect for the Teuton generally, we confess that we have some

doubt as to the thoroughness of the man who could have passed our pharmaceutical and medical preliminaries "with ease" at the mature age of ten or twelve, according to the contention of the *Pharmaceutische Zeitung*. The other argument advanced by "Q. E. D.," that no similar favour is shown in Germany to Englishmen, cannot fail to be a popular one, unsound though it is. But the German responder this week hardly turns the flank of this position by showing that it is the Government and not any private society which is responsible for the regulations which would check any probable British invasion of German pharmacy.

There is not much reason in the national prejudice which decries the appearance of foreigners in our midst. In a country which has resources, the increase of population implies the development of wealth; and if Germany will take the trouble and bear the expense of raising and training the men who, when they reach a productive age, bring their talents to this market, so much the better for England, and so much the worse for Germany, in point of national economy. But it cannot be denied that, if the nation benefits, classes and individuals must suffer; and we imagine that no one can maintain that British pharmacy could be improved by more competition than that which at present surrounds it. Is, then, such a thing as a German pharmaceutical invasion at all possible or probable? Our correspondent this week scouts the idea, but he admits that "numerous applications are constantly reaching him," asking how can pharmacists obtain situations here. It happened, too, that last week the English Council had to follow the precedent set in Mr. Hebler's case in regard to a Swiss gentleman who wished to avoid the Preliminary. We certainly see nothing very outrageous in the supposition that if we make the path of pharmacy in this country exceptionally smooth for the foreigner, he, who is legislatively blocked from a free pursuance of his calling in his own land, and conscious, as he seems to be, of his own infinite superiority to ourselves, may take rather unexpected advantage of the opportunity offered to him. For ourselves, we believe that the majority of British pharmacists will be able to stand the competition of any foreigners, and will ultimately give a good account of themselves; but we are very much inclined to doubt either the justice or the wisdom of making special exceptions in behalf of any class or race—exceptions which are sure to become some day awkward precedents, and which do unquestionably contravene the spirit of our pharmacy regulations.

COAL-TAR CHEMISTRY.

DURING the past twenty-five years the study of chemistry by experts has been to a very great extent limited to the study of the products of coal-tar. And among the abundant results of this investigation contributions to almost every branch of art, science, and industry have been made. Just at present the most richly favoured recipient of the coal-tar investigator's favours is the profession of medicine. Among the many synthetical compounds which have been formed to aid in the treatment of disease, many have probably come to stay; and of these the one which seems to have secured the firmest foothold is antipyrin.

Our attention is particularly directed to this subject at this moment by the receipt from Messrs. Meister Lucius & Brüning, of Höchst-am-Main, the patentees and manufacturers of antipyrin, of a most artistically produced album containing views of their works and specimens of silks dyed with colours of their manufacture, arranged in the form of a perfect spectrum, published as a memorial of the twenty-fifth anniversary of the foundation of their house. With

the album they give some interesting details of their own history, and as they happen to be among the largest representatives of the manufacture of aniline and other coal-tar products, the record they give has a value outside that of mere personality.

In 1862, when fuchsin was worth 60s. a lb., the firm of Meister Lucius & Brüning was founded, and, curiously enough, in the very first year of its establishment the price of the compound named fell to 24s. for the unit given—an incident by no means favourable to the success of the undertaking. Nevertheless, its growth does not appear to have been appreciably hindered thereby, as we judge on comparing the few buildings shown in the first sketch in the monograph with the small town, covering 60 hectares, which the works and associated structures now form.

The data furnished relating to the production of the crimson dye—fuchsin—already referred to are worth mentioning. In the earliest years of its preparation it was manufactured by heating together 25 lbs. of aniline oil with from 35 to 50 lbs. of arsenic anhydride to 180° C., or thereabouts. The daily output of the material at that time was from 10 to 14 lbs., while in 1872, working with ten vessels, it was increased to nearly 7 cwt. per day. A year previous to the last date the firm were fortunate enough to discover the applicability of nitro-benzol as a substitute for arsenic acid, which eliminated the element of danger in the manufacture and use of the product arising from the employment of so powerful a poison as arsenic.

Of considerable interest, as showing once more what an important bearing the most trivial incidents may have in life, is the history of the body known as "aldehyde green," which may claim the gratitude of the firm as having been a principal lever by which they have raised themselves to their present position. It was known that acetic aldehyde with fuchsin yielded a beautiful blue colour, which unfortunately, however, was rapidly evanescent when exposed to light, and, therefore, inapplicable to general use. While one day complaining to a friend of the fleeting nature of this colour, it was remarked to Usébe, the chemist who was working on the subject, that the similar action of light upon photographs was prevented by fixing the impressions with sodic hyposulphite. Usébe was struck by the observation, and in a spirit of mere experiment tried the process upon the blue colour, and, behold! "aldehyde green" appeared—a material which attracted a great deal of attention for some time. Unfortunately, however, the colour could only be obtained in solution, which, of course, detracted from its general application. This difficulty also was overcome by the observation made in a casual way by Dr. Brüning that a dark precipitate was formed in the solution when an old glove was immersed in it to be dyed. This he traced to the formation of a tannate of aldehyde green, which was thereupon prepared in quantity, introduced into commerce, and largely used.

As the business developed special works had to be constructed for the production of the acids, particularly sulphuric acid, so extensively used. These were completed in 1880, and they form quite a unique specimen among buildings of the kind. Later on, as the industry still increased, the firm was converted into a limited company, the capital of which is now, we believe, 12,000,000 marks; associated works have also been established in Moscow and Paris, which produce the same articles, including antipyrin.

Some idea of the present extent of the works, which are placed upon the river banks, may be obtained from the statement of the fact that there are now engaged in the service of the firm 52 large boilers, while there are also used 92 steam motors and gas engines, representing a force of 1,840-horse power. The workmen number 1,860, the overseers 50, and

the chemists 57. Also in the employ of this house are 9 engineers, and a staff of 86 persons in the offices.

To mention the 1,700 or 1,800 colours which are produced by name would be, of course, impossible, but it is noteworthy that no less than 23,108,000 kilogrammes of sulphuric acid of different strengths and 12,800,000 kilogrammes of other acids were used last year in the industry. Antipyrin, which was first built up here by Knorr in 1883, and the first notices of which appeared in the medical papers of the following year, is the product at these works of chief interest to the pharmacist.

The following figures, which represent the consumption of the materials named, as recorded in the works during the past year, convey an idea of the magnitude of the business:—Of packing material were sent out—25,310 casks, 1,962,000 tins, 803,200 bottles, 25,310 boxes. Of raw material were used—64,230,000 kg. coals, 3,624,000 kg. products of tar distillation, 2,112,000 kg. caustic soda, 350,000 kg. various potash salts, 1,610,000 kg. carbonate of soda, 1,905,000 kg. saltpetre, 12,661,000 kg. sulphide of iron, 1,503,000 kg. iron filings, 309,000 kg. methyl alcohol and spirit, 1,635,000 kg. different chemicals, 10,578,000 kg. rock salt, 4,312,000 kg. lime.

The works have their own railway lines throughout, their own gas-making apparatus, producing 12,000 cubic metres daily, besides electric lighting plant for such rooms as are used for the working or storing of compounds sensitive to light. Every precaution is at hand to enable fires to be successfully combated in their earliest stages. Of course, considering the nature of the substances employed, small fires cannot be wholly prevented from breaking out, but they are soon subdued by the perfect organisation of fire prevention. There are also a number of funds existent, such as that for widows, which was started by the factory with the sum of 7,500*l.*, and which has now passed 12,000*l.* In the neighbourhood of the works are ninety-four dwelling-houses in which the employes live, and there are also a number of provision stores worked on a co-operative system, by which the profits are divided yearly among the customers. The working hours are nine and a half per day, and the average wages per day paid to each workman is 3*s.* 1*d.*

As a contrast to the figures we have quoted, it may be mentioned that when the business was established in 1862 the plant consisted of a small steam-boiler and a 3-horse power engine, and the staff consisted of five workmen, one clerk, and one chemist.

METHYL DRINKING.

THE *Scottish Leader* has again directed very prominent attention to the alleged large consumption of methylated spirit in Edinburgh as a beverage. Last Sunday a special correspondent representing that journal went into the lower parts of the city to ascertain facts. He took with him his empty pint bottle with his coppers, and this is the story he tells:—

"I took care not to appear too reputable. It appears I succeeded—at all events, I had no difficulty in getting into company on equal terms with two men who did not set much store by themselves. They were hanging around a druggist's shop, and a question brought out the fact that they were desperately anxious to obtain some 'dynamite.' I soon learned that they were very familiar with the stuff, although both seemed fairly creditable human types. One was young, raw looking, and not to all appearance a sot. The other was an oldish man, with blazing, intelligent eyes, and a rugged cast of countenance. They might have been of the poorer class tradesmen; they did not look like labourers; probably they lived by their wits. They were searching for methy-

lated spirit; and they told me so at once, and I agreed to join in the quest. They wished the liquor; I desired to get inside the traffic, so we slumped our capital. For obvious reasons my contribution was extremely small; theirs was even less. The whole sum would not have purchased a gill of drinkable whisky; and still we were in hopes of getting two or three gills of liquor that would certainly produce a satisfying degree of intoxication. Our search, however, was not a triumphant progress. It was arranged that my companions should effect the purchase while I waited outside the shops. They were checkmated at the outset; the first druggist refused to sell one drop of methyl; simply could not be persuaded to hear reasons, and so it was at every one of half-a-dozen shops. Sometimes the druggist refused politely but firmly; sometimes in a cross-grained manner. My friends alleged that the spirits were wanted for various purposes; and their reasons were very creditable to their imagination. But they failed all the same, whether they said a great deal or whether they contented themselves with merely producing the empty bottle. Then they became discouraged, and talked about articles that had appeared in the newspaper frightening dealers in methylated spirits. They were very wroth with the druggists for this 'new departure,' though the language they used was much stronger. The shops were shutting up when the church bells began to ring, and we dropped the hunt. My companions were in the dumps, but the older one was willing enough to talk about the morning's experiences, and had very definite views about methyl-drinking. Our conversation was jerky and disconnected a bit, but not uninteresting to one wishful of getting thoroughly at the secrets of this trafficking in methylated spirit.

"Well," I said, 'we've been down on our luck this morning.'—'Yes,' was the reply; 'I don't understand what's up with the druggists. I'm told that some articles appeared in the *Leader* about the drink. The druggists are scared, and no mistake, when they won't sell a drop.'

"You could get as much as you wanted before?"—'Rather; on any Sunday before there was never any bother. It's hard that a fellow can't get a drop of drink to wet his throat on a morning like this. But those who are responsible for this won't care, I suppose, if poor folks were to choke for want of something. It's hard, I say again.'

The remainder of the conversation between the correspondent and the methyl drinkers goes to show that they buy the spirit partly because it is cheap—they said they could get "blazing fou" on twopennyworth—and partly because they can get nothing else on Sundays. We have reproduced this observer's report because it is about the first definite statement we have had; and it amounts to very nearly—nothing. The *Leader* published articles on Friday and Saturday of last week containing sensational, but entirely vague, statements as to the extent of the trade, and the report we have quoted was issued on Monday. It is, no doubt, gratifying to the conductors of the *Leader* to believe that the influence of their paper is so great as their correspondent thinks he found it to be; but it is at least conceivable that the facts are capable of some other conclusion.

In Friday's *Leader* appeared this paragraph:—

"There are a hundred and sixty-five persons within the revenue collection of Edinburgh who are entitled to retail methylated spirit. Most of these are chemists and druggists, but any person may obtain a licence on payment of the modest sum of ten shillings. It is not flattering to some members of the drug trade, but it is true, that the revenue officials almost prefer lay retailers; that is, they think that in the hands of these retailers there is no danger that the stuff will be tampered with or improperly used."

Is there any foundation at all for this charge against the Edinburgh drug trade? The only evidence we know of is that of the *Leader* man quoted above, who with his associates tried at six likely chemist's shops, and failed to get the spirit at any one. The *Leader* should either justify its attack on the druggists or withdraw it.

We do not mean to doubt the probability of methylated

pirit being consumed to some extent, perhaps to a large extent, not only in Edinburgh and Glasgow, but in London and elsewhere. We report a case this week which suggests quite a large traffic in the article in the East-end of London. On moral, physical, and commercial grounds we shall welcome every attempt to expose and put down the abominable business, but we do not find ourselves able to compliment the staff of the *Scottish Leader* on the thoroughness of their efforts in the cause.

VACCINATION OF DOGS.

In this age of science made popular, it is astonishing to find a large number of dog-owners gladly paying half a guinea to the most illiterate pretenders to vaccinate their dogs as a preventive of distemper. This we could well understand if the animals were inoculated with a protective material or attenuated virus which, after producing a mild attack of distemper, would "protect" from the more virulent and always dangerous disease known as distemper. Such is not the case, however, nor is it pretended even by the blacksmiths and dog-doctors who carry on this lucrative profession. They simply prick the puppies two or three times with a lancet dipped in vaccine lymph, as if they were vaccinating a human being to protect it from small-pox. There is no similarity whatever between the vaccine variola of man and distemper of dogs. One might as well prick a soldier with a bayonet to prevent him getting shot.

We understand that certain experiments are being conducted by the leading lights of the veterinary world to produce, if possible, an attenuated distemper lymph or matter that really will prove protective, and this, if successful, will be among the greatest feats of the century. It may not be generally known that such simple and comparatively painless operations as inoculating dogs come within the Vivisection Act, and the operator needs to have a licence. Any operation that is not done in the *bonâ-fide* belief of its efficacy for the cure or amelioration of disease is illegal, while the most barbarous practices are daily carried on with impunity, because farriers and others believe they will do good. One of these curative operations is the cutting open of a cow's tail, and insertion of pepper and salt and other irritants, to make her "get up." Since the spinal cord does not extend into the tail at all, the "belief" is founded on the grossest ignorance of anatomy.

THE LIQUORICE INDUSTRY IN ASIA MINOR.

LIQUORICE juice is so generally looked upon as the product, almost exclusively, of Italy and Spain, that most people, even though they may be dealers in the article, will be surprised to find that we import, weight for weight, almost as much liquorice from Turkey as from Italy, although, of course, the average value of the Italian product is far higher. Official statistics disclose the fact that from 1883 to 1887, inclusive, we received from Turkey (in this case almost synonymous with Smyrna) an aggregate of 5,694,752 lbs. of juice, worth 14,022*l.*, or 45*s.* 6*d.* per cwt. on the average; while from Italy our import during the same period amounted to 6,498,128 lbs., worth 217,403*l.*, or, say, 74*s.* 6*d.* per cwt. Spain, whence the juice derives its popular name, is quite sinking into insignificance as a liquorice-producing country, its aggregate exports to the United Kingdom from 1883 to 1887, inclusive, having been only 399,616 lbs., worth 7,943*l.*; while last year they were only 13 cwt., worth 72*l.*, or practically so small as to remain without any effect on the course of the market.

Turkey in Asia is therefore, with the possible exception of Italy, the largest producer of liquorice in the world. The Smyrna liquorice industry, which represents an annual value of about 160,000*l.*, and gives employment to many hundreds of people, is of comparatively modern origin, and owes its existence to a British merchant named Clark, who, about 1853, conceived the idea of turning into commercial use the vast quantities of liquorice root which he had noticed growing wild in various parts of Anatolia, and especially in the valley of the Mæander, a river famous in classic lore as the site of the cities of Antiochia and Miletus. The natives were totally unacquainted with the value of the root, and to them its existence was a considerable nuisance, the plant being so difficult to destroy that it materially interfered with the tilling of their fields. When, therefore, Mr. Clark, having sent samples of the Anatolian liquorice root to Europe for analysis, and satisfied himself of its commercial value, started a liquorice factory in the small town of Sokia, near the mouth of the Mæander, the natives were only too glad to allow his collectors to take away the roots from their fields free of charge, and the industry during the first years of its existence must have been a very profitable one indeed, for it is said that the gatherers received about 1*s.* 8*d.* for every cwt. of root which they brought to the factory, the material costing the firm nothing, and the fresh root yielding about 30 per cent. of juice. For many years Mr. Clark continued to hold a monopoly of this lucrative industry, and upon his retirement he transferred the business to one of his employes, the style being subsequently altered to McAndrew & Forbes. Mr. Clark's successors largely extended the business, establishing juice-boiling establishments at Aidin, Kotchaili, and Nasli, and laying almost the whole of the Mæander valley under tribute for the collection of root.

Determined efforts have repeatedly been made to wrest the monopoly from the British firm, but their hold upon the business is so strong as to render serious competition with them a matter of great difficulty. But quite lately an American house has established an export business in roots in the Hermos valley, though its operations do not seem to include the manufacture of juice. A German firm have also within the last few years started a boiling establishment at Omurlu, where about 75 cwt. of root are said to be treated every week. Owing to this competition it is reported that the English firm have been compelled to revise their terms with the farmers for the collection of the root. They now pay them a small royalty, and receive in return the exclusive right of digging for periods extending generally over nine years. The best root is found at Omurlu, Karahait, and Kotchaili in the Mæander valley, and at Menemen, along the course of the Hermos river. The roots are gathered from the middle of September until the middle of April, after which period the fields are required for cultivation, and the root, moreover, loses its juice. The treatment of liquorice root for shipment or for juice manufacture does not materially differ from the system, obtaining in Italy and other countries. The root is left to dry in the open from the gathering time until June or July, being turned over once a month. It is then dried, pressed, packed in bales of about 2½ cwt., and exported *via* Smyrna or Scala Nova, the bulk of the shipments going to the United States, where, since a heavy customs duty was placed upon juice some years ago, both Messrs. McAndrew & Forbes and their American competitors have erected factories for treating the root. The principal consumers of liquorice are the American makers of chewing tobacco, but large quantities are also employed in brewing and for the manufacture of blacking. Since the United States placed a duty upon the juice that preparation is shipped mostly to England

and Germany, Liverpool being the principal centre of the trade. The juice is sold there according to brand, in the same way as the Italian, and the value at present ranges from 29s. to 40s. per cwt. For making juice the roots are cut small, crushed, and placed in a large cauldron holding about 5 cwt., where they are boiled with water for three or four hours, when the liquid is decanted into another container. Another $2\frac{1}{2}$ cwt. of roots, with more water, are then added to the residue in the first cauldron, and after again boiling for a few hours the liquid is added to that in the second boiler, until about six lots have been treated, and the juice in the second container has assumed the consistency of a tough mass. This mass is then decanted into cases lined with paper, and holding about $2\frac{1}{2}$ cwt., where it soon forms a solid block. In 1887 21,480 such cases were exported from Smyrna. The fresh roots yield from 30 to 32 per cent. of juice, and the woody residue is used for fuel. It is estimated that, inclusive of all charges and dues, the cost of the juice to the manufacturers is about 17s. 4d. per cwt., while its selling price at Smyrna averages 33s. 8d. per cwt., thus leaving a large margin of profit, notwithstanding the competition. Some time ago the Turkish finance authorities became alive to the fact that a welcome addition to the exchequer might be obtained by taxing so profitable an industry, and accordingly, after the manner of the Sick Man, an "Ushur," or tithe of 10 per cent., subsequently raised to 20 per cent., has been imposed upon the manufacturers. It is worthy of note that piquorice root occurs not only in Anatolia, but also in Mesopotamia and Persia (it is now frequently imported here from ports in the Persian Gulf), in the Caucasus, and along the shores of the Caspian, the Baku oil region being especially rich in it.

Smuggling Spirits.

The Customs officers of Harwich have just secured a conviction against five men who, after a long trial before Mr. Justice Manisty and a jury, were found guilty on Wednesday last of various charges connected with smuggling spirits from the Continent. The defendants, who were brought up in custody, were F. A. Venedigger, E. Wolff, L. Joseph, A. Bonnardel, and L. Theophil, and they were charged with being concerned in smuggling 381 gallons of proof spirit, value 343*l.*, and each of them had become liable to a penalty of 1,023*l.*, being treble the amount of the value and the duty. The fraud was said to have been carried out in an ingenious manner. On May 3 last a bill of lading was sent for 19 baskets, containing tins of olive oil, which were to be shipped at Antwerp on board the steamer *Norwich*. The vessel arrived at Harwich with the goods on May 4, which were sent up by railway to Bishopsgate Street. From thence the baskets were carried to a small warehouse, which had been rented at 17 Broad Street, Bloomsbury, and then to a similar warehouse at 23A Prince's Square, Cable Street, St. George's-in-the-East. About a quarter of an hour after they arrived at this place Mr. Llewellyn, a Customs officer, went there. He found that down the middle of each canister there ran from the neck to the bottom a narrow cone. The neck of the canister was small, and so formed that when the officer put in his rod he could not work it so as to touch the side of the cone. This cone contained about $1\frac{1}{4}$ gallon of olive oil, whilst the outer part of the can held about 13 gallons of brandy. There was a little side spout which communicated with the cone, so that anyone who poured out through this spout would get olive oil. The officer, however, found that one of the canisters had been pierced through the outside; and in a vessel standing by there were about 7 gallons of brandy, of the same kind as that which remained in the canister. The defendants pleaded "Not guilty," and the defendant Venedigger pleaded that he was a commission agent in olive oil, and acted in what he did in the course of his business. The defendant Wolff, it was said, was, down to the time in question, translating clerk in the service of the Great Eastern Railway Company. Joseph said that he had been employed, and had come in the hope of earning half a sovereign. The

other two defendants made no statement, as they could not speak English. The facts were undisputed, and the only question for the jury was whether all the defendants were associated in the frauds on the revenue. The jury found them all guilty, and the judge made an order for immediate judgment and execution.

* *

Flavouring Hay.

Mr. M. Prashkauer, a seed merchant in London, opportunely directs the attention of those whom it may concern to the virtues of fenugreek as a spice for injured hay. This seed, when powdered and sprinkled over the hay or damaged grain, has the property of sweetening it and rendering it palatable to the beasts. In the East it is mixed with the food of the population for the purposes of assisting the digestion, at the same time flavouring the dry food, on which those people mostly subsist. Unlike any other spice-seed, fenugreek has valuable feeding properties, and is in itself most wholesome and most nutritious; it is a tonic, and engenders a healthy appetite. The seed is to be had at a price not much in excess of ordinary food grains, and as it combines in itself both the feeding and the flavouring element, the outlay for the farmer in using it even on a large scale is comparatively trifling. People who have used the seed successfully, say, that 7 to 10 lbs. of fenugreek seed will spice a ton of hay or grain, unless very badly damaged indeed. Fenugreek contains an odorous principle not unlike coumarin, and its peculiar flavour seems to be specially attractive to horses and cattle. This year, when hay is likely to be abundant but flavourless, chemists might with advantage to the human and brute creation bring to the notice of stock-keepers this useful condiment.

THE USE OF EFFERVESCENT PREPARATIONS.

It is generally considered that effervescing preparations are merely a pleasant way of giving nauseous medicines. This is a perfunctory view of the matter. Carbonic acid gas is itself a valuable therapeutic agent, and in calling attention to the subject (*Therap. Gaz.*) Dr. Frank Woodbury does good service. He believes that the gas plays as important a part in the animal economy as it does in the vegetable. The tissues are bathed with it, and the blood constantly contains a large proportion (30 per cent. by volume); experiments show that blood has nearly twice the affinity for carbonic acid gas than pure water possesses, and will absorb nearly twice its volume. As carbonic acid is always present in the animal body, it must play an important part in nutrition, and it probably has other functions, amongst them retardation of oxidation and prevention of excessive combustion. A generation ago effervescing draughts were much more common than they are now, and Dr. Woodbury reproduces the following old prescription for a draught which was used with great success "to arrest vomiting and irritability of the stomach:—

Carb. pot.	..	..	..	..	gr. xx.
Aq. mentha pip.	..	..	..	..	3i.
Tinct. catechu	..	..	..	..	5i.
Syrup. simp.	..	..	..	..	5ij.
Tinct. opii	..	..	..	..	℥x.

M.

Dissolve 18 grains of citric acid in 1 oz. of water, or have in readiness a tablespoonful of lemon-juice. Let the patient swallow the mixture of carbonate of potash, and then the acid solution or lemon-juice.

After referring to the usefulness of effervescing draughts as vehicles for such medicines as castor oil and quinine, and the benefits derived from the administration of Apollinaris and other carbonated waters in fevers, the writer proceeds to state that the administration of small Seidlitz powders, taken while effervescing, is attended with excellent effect where vomiting is persistent. The sedative action of the carbonic acid gas is also seen in the relief of severe gastralgia or enteralgia. Where constipation is caused by rich and highly-concentrated food, so that the bowel is not sufficiently distended, the administration of saline laxatives in effervescent form is especially useful. In disordered digestion, accompanied by headache, the condition properly known as sick-headache, the effervescent preparation may be given alone, or combined with bromides or other agents. In true migraine, the combination of a small amount of deodorised tincture of opium with each dose gives speedy relief.

USEFUL RECIPES FROM THE "NATIONAL FORMULARY."

(Continued from page 157.)

Lac Fermentatum—Fermented Milk—Kumyss.

Cow's milk, fresh	32 fluid ounces
Yeast, semi-liquid	63 minims
Sugar	1 troy ounce

Dissolve the sugar in the milk, contained in a strong bottle, add the yeast, cork the bottle securely and keep it at a temperature between 23° and 32° C. (75° to 90° F.) for six hours; then transfer it to a cold place.

Liquor Carmini—Solution of Carmine.

Carmine	1 troy ounce
Water of ammonia	6 fluid ounces
Glycerin	6 "
Water, enough to make	16 "

Triturate the carmine to a fine powder in a wedgewood mortar, gradually add the water of ammonia, and afterwards the glycerin, under constant trituration. Transfer the mixture to a porcelain capsule and heat it upon a water-bath, constantly stirring, until the liquid is entirely free from ammoniacal odour. Then cool, and add enough water to make sixteen (16) fluid ounces.

Note.—The best quality of carmine, known in commerce as "No. 40," should be used for this preparation.

Liquor Coccineus—Cochineal Colour.

Cochineal, in No. 50 powder	1 troy ounce
Carbonate of potassium	$\frac{1}{2}$ "
Alum	$\frac{1}{2}$ "
Bitartrate of potassium	1 "
Glycerin	8 fluid ounces
Alcohol	1 fluid ounce
Water, enough to make	16 fluid ounces

Triturate the cochineal intimately with the carbonate of potassium and eight (8) fluid ounces of water. Then add the alum and bitartrate of potassium successively, heat the mixture to boiling in a capacious vessel, then set it aside to cool, add to it the glycerin and alcohol, filter, and pass enough water through the filter to make sixteen (16) fluid ounces.

Liquor Ferri Iodidi—Solution of Iodide of Iron.

Iron, in the form of fine, bright, and finely-cut wire	3 troy ounces
Iodine	4.718 grains
Hypophosphorous acid (N. F.)	130 minims
Distilled water, enough to make	16 fluid ounces

Mix the iron with twelve (12) fluid ounces of distilled water in a flask, add about one-half of the iodine, and agitate continuously until the liquid becomes hot. Then moderate the reaction by placing the flask in cold water, or by allowing cold water to flow over it, meanwhile keeping up the agitation. When the reaction has moderated add one-half of the remaining iodine at a time, and carefully moderate the reaction each time, in the manner above directed. Finally, raise the contents of the flask to boiling and filter immediately through moistened pure filtering-paper (the point of the filter being supported by a pellet of absorbent cotton) into a bottle containing the hypophosphorous acid. When all the liquid has passed rinse the flask with one-half ($\frac{1}{2}$) fluid ounce of boiling distilled water and pass this through the filter. Cork the bottle and set it aside to cool. Finally, add enough distilled water to make the product measure sixteen (16) fluid ounces.

Each fluid drachm contains about 45 grains of iodide of iron (ferrous).

Note.—On mixing 1 volume of this solution of iodide of iron with 5 volumes of syrup, the product will contain about 60 grains of iodide of iron (ferrous) in each fluid ounce, and will be practically identical, measure for measure, but not weight for weight, with the official syrup of iodide of iron.

Liquor Seriparns—Liquid Rennet.

Calves' rennet, fresh	2 troy ounces
Chloride of sodium	360 grains
Alcohol	4 fluid ounces
Water	16 "

Dissolve the chloride of sodium in the water, add the alcohol, and macerate in this mixture the rennet (or the washed mucous membrane of the fresh stomach of a suckling calf), during three days, under frequent agitation. Then filter.

Note.—If this liquid is to be used merely for curdling the milk, without separating the whey as a distinct layer, it should be added to the milk, previously warmed to a temperature of about 35° C. (95° F.), and the mixture should then be set aside undisturbed until it coagulates. If the whey is to be separated the liquid rennet should be added to the milk while cold, and the mixture heated to about 35° C. (95° F.), but not exceeding 40° C. (104° F.). One part of the liquid should coagulate between 200 and 300 parts of cows' milk.

Mistura Chloral et Potassii Bromidi Composita—Compound Mixture of Chloral and Bromide of Potassium.

Chloral	4 troy ounces
Bromide of potassium	4 "
Extract of Indian cannabis	16 grains
Extract of hyoscyamus	16 "
Alcohol	1 fluid ounce
Tincture of quillaja (N. F.)	1 "
Water, enough to make	16 fluid ounces

Dissolve the chloral and bromide of potassium in twelve (12) fluid ounces of water, dissolve in this solution the extract of hyoscyamus and add the tincture of quillaja. Then dissolve the extract of Indian cannabis in the alcohol, and add this solution gradually, and under shaking, to that first prepared. Finally, add enough water to make sixteen (16) fluid ounces.

This preparation should be shaken whenever any of it is to be dispensed.

Each fluid drachm contains 15 grains each of chloral and of bromide of potassium, and $\frac{1}{8}$ grain each of extract of Indian cannabis and of extract of hyoscyamus.

Note.—The resinous extract of Indian cannabis is merely held in suspension by means of the tincture of quillaja, as it is practically insoluble in the liquid. If the mixture is filtered the resin will remain on the filter.

Mistura Chloroformi et Opii—Mixture of Chloroform and Opium—Chloroform Anodyne.

Purified chloroform	2 fluid ounces
Oil of peppermint	16 minims
Tincture of Indian cannabis	2 fluid ounces
Tincture of quillaja (N. F.)	2 "
Fluid extract of belladonna	128 minims
Deodorised tincture of opium	2½ fluid ounces
Tincture of capsicum	1 fluid ounce
Purified extract of glycyrrhiza	240 grains
Water	$\frac{1}{2}$ fluid ounce
Syrup, enough to make	16 fluid ounces

Triturate the purified extract of glycyrrhiza with the water and one (1) fluid ounce of the syrup until it is dissolved. Mix the fluid extract of belladonna, deodorised tincture of opium and tincture of capsicum, and add them to the solution first prepared. Then mix the chloroform, oil of peppermint, tincture of Indian cannabis, and tincture of quillaja, and add them to the mixture. Finally, add enough syrup to make sixteen (16) fluid ounces and mix the whole thoroughly together.

This mixture should be shaken whenever any of it is to be dispensed.

Each fluid drachm represents 7½ minims of chloroform, 7½ minims of tincture of Indian cannabis, 3¼ minims of tincture of capsicum, 1 minim of fluid extract of belladonna, and about 1 grain of opium.

Note.—This preparation is intended to fulfil the same purposes as the "Tinctura Chloroformi et Morphine" of the British Pharm., though the composition of the latter differs materially from that of the mixture above given.

Mistura contra Diarrhoeam—Diarrhoea Mixture.**1. Cholera Mixture.**

Tincture of opium,
Tincture of capsicum,
Tincture of rhubarb,
Spirit of camphor,
Spirit of peppermint, each equal volumes

Mix them, and filter.

Note.—The formula above given, which appears to be that in most general use, is also known under the name of "Sun Mixture."

Of other similar preparations, in more or less general use, the following may be mentioned here:—

2. Loomis' Diarrhoea Mixture.

Tincture of opium 1 fluid ounce
Tincture of rhubarb 1 " "
Compound tincture of catechu (U. S. P.) 1 " "
Oil of sassafras 20 minims
Compound tincture of lavender, enough
to make 4 fluid ounces

3. Squibb's Diarrhoea Mixture.

Tincture of opium 1 fluid ounce
Tincture of capsicum 1 " "
Spirit of camphor 1 " "
Purified chloroform 120 minims
Alcohol, enough to make 5 fluid ounces

4. Thielmann's Diarrhoea Mixture.

Wine of opium 1 fluid ounce
Tincture of valerian 1½ fluid ounces
Ether ½ fluid ounce
Oil of peppermint 60 minims
Fluid extract of ipecac. 15 " "
Alcohol, enough to make 4 fluid ounces

This preparation is practically identical with the "Mistura Thielmanni" of the Swedish Pharm.

5. Velpeau's Diarrhoea Mixture.

Tincture of opium,
Compound tincture of catechu (U. S. P.)
Spirit of camphor, each equal volumes

Mistura Copaibæ Composita—Compound Copaiba Mixture—Lafayette Mixture.

Copaiba 2 fluid ounces
Spirit of nitrous ether 2 " "
Compound tincture of lavender 2 " "
Solution of potassa ½ fluid ounce
Syrup 5 fluid ounces
Mucilage of dextrin (N. F.), enough to
make 16 " "

Mix the copaiba with the solution of potassa and the spirit of nitrous ether. Then add the compound tincture of lavender, and lastly, the syrup and mucilage of dextrin. Mix the whole thoroughly by shaking.

This mixture should be well agitated whenever any of it is to be dispensed.

Each fluid drachm contains 7½ minims of copaiba.

Note. The above mixture has usually been prepared with mucilage of acacia; but if mucilage of dextrin (N. F.) be used it will keep for a longer time without separating.

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

ARBLASTER—WRIGHT.—On August 2, at Christ Church, Sparkbrook, Mr. Charles Arblaster, of Winsford, Cheshire, surgeon, son of Mr. C. J. Arblaster, chemist and druggist, Hagley Road, Edgbaston, to Clara Ashworth, daughter of Mr. Henry Wright, Monona House, Small Heath.

WEBB—COLE.—On July 31, 1888, at the Baptist Chapel, Marlowes, Hemel Hempstead, by the Rev. D. Tatton, Mr. J. H. Webb, chemist and druggist, of Luton, to Evangeline (Eva), fourth daughter of Mr. C. J. Cole, of Hemel Hempstead.

DEATHS.

CANNING.—We much regret to report the death of Mr. William Canning, chemist and druggist, which occurred on July 25, 1888, at his residence, Rignold Road, Camberwell. Mr. Canning was 67 years of age. He had been in business as a chemist and druggist in his younger days, but afterwards became associated with the United Society of Chemists and Druggists, assisting the late Mr. Buott in his organising efforts. Afterwards Mr. Canning came on to the staff of this journal, and subsequently for many years edited and managed the monthly prices current published by Mr. Wm. Mather. He also compiled and published two books which had some popularity—"Select Practical Notes and Formulæ," and "The Chemists' and Dispensers' Vade Mecum." For some years Mr. Canning has been unable to get about, and he has had to limit his activity to such literary work as came in his way. The death of a son last Christmas time affected him very deeply, and his friends are not altogether surprised at his own breakdown, though he had for many years borne heavy trouble with singular patience and cheerfulness.

FINDLATER.—At New York, on July 19, William G. Findlater, chemist, late of Aberchirder, Banffshire.

JONES.—On July 28, Mr. Rowland Gill Jones, chemist and druggist, Stourbridge. Aged 61.

SLUGG.—We regret to announce the death on August 3, at his residence, Chorlton-cum-Hardy, of Mr. Josiah T. Slugg, F.R.A.S., for many years a well-known Manchester chemist. He was born in the year 1814, and was the son of the Rev. Thomas Slugg, a Wesleyan minister of some standing. He was educated at Woodhouse Grove School, an establishment for the sons of Wesleyan ministers, near Leeds. He was apprenticed to the late Mr. W. Dentith, chemist, &c., formerly of Market Street, Manchester. Mr. Slugg began business on his own account, first as a manufacturer of soda water, and subsequently as a chemist and druggist, in Medlock Street, Hulme, from which place he removed at length to Stretford New Road. He took a great interest in astronomical science, and following the instructions of the late Dr. Dick, he made a telescope, with the aid of which he saw, for the first time, the moons of Jupiter. He afterwards constructed an improved instrument; and believing that others would be glad to learn how to make one equally good at a small cost he wrote letters to the local newspapers giving plain directions for that purpose. These letters were reprinted in the *Times* and several other journals, and attracted considerable attention. Receiving applications for more detailed information, Mr. Slugg published two little works entitled, "The Stars and the Telescope," in the second of which he explained the mode of constructing a cheap achromatic instrument powerful enough to exhibit the rings of Saturn. At the same time he announced his ability to supply a telescope of this kind for 3*l.*—the lowest price up to this period being about 10*l.* Much interest was felt in this experiment by the friends of popular instruction and by persons eminent in science, including the late Earl of Durham, the Hon. Mrs. Ward, authoress of "Telescope Teachings"; and Sir E. J. Reed. It was by the aid of one of Mr. Slugg's inexpensive telescopes that Mr. Proctor, the distinguished astronomer, first discerned ice and snow on the planet Mars. In the year 1866 Mr. Slugg was elected a Fellow of the Royal Astronomical Society. He did excellent service as a generally gratuitous lecturer on various branches of physical science. Besides the books mentioned, Mr. Slugg issued a larger work, entitled "Observational Astronomy," which contained maps of the stars, and a description of the constellations. In 1880 he published his "Reminiscences of Manchester Fifty Years Ago"; and in 1885, when over 70 years old, an admirable history of the school in which he was educated. Alike in his writings, his lectures, and his conversation he displayed his talent for clear and forcible exposition, enlivened by a quiet humour and a somewhat quaint originality. Modest, amiable, sincerely desirous to be useful, he did a good work in the promotion of popular education in Manchester, which entitles him to respectful and grateful remembrance. He was a local preacher in the Wesleyan Connexion for more than forty years.

WALE.—On July 29, Mr. William Wale, chemist and druggist, Griffydham, Ashby-de-la-Zouch. Aged 73.

WILLS OF DECEASED CHEMISTS.

The will (dated December 10, 1885) of the late Mr. G. W. Allsop, chemist and druggist, Denman Street, Nottingham, who died on February 29 last, was proved at Nottingham on March 16, by Mrs. M. Allsop, the widow and sole executrix, to whom the testator bequeaths the whole of his property absolutely. The gross personal estate amounted to 534*l.* 9*s.* 10*d.*, and the net to 449*l.* 0*s.* 5*d.*, with no leaseholds.

The will (dated December 8, 1884) of the late Mr. Edward Collinson Bell, pharmaceutical chemist, Berkeley, who died on March 16 last, was proved at Gloucester, on April 21, by Mrs. S. Bell, the widow (the sole executrix during her life). The personal estate amounted to 5,341*l.* 16*s.* 6*d.* The testator devises his real estate for life to his wife, and upon her decease to his son-in-law, John Fancourt, upon trust. He gives legacies of 100*l.* to his wife and to each of his children. To his wife he also leaves his household effects, &c., and the income from his personal estate for her life. Upon her death the property is to be invested for the joint and equal benefit of his children.

The will (dated April 14, 1888) of the late Mr. Thomas Bullen, chemist and druggist, Hove, Brighton, who died April 17 last, was proved at Lewes, on May 19, by Mrs. H. Bullen, the widow, and Mr. J. Jackson Clarke, two of the executors, Mr. S. J. Weston, the other executor, having renounced the probate, &c. The gross personalty amounted to 5,306*l.* 12*s.* 2*d.*, and the net to 4,285*l.* 0*s.* 8*d.* The testator devises the proceeds of his life policy to his wife. He directs his estate to be realised and the proceeds invested, the income to be paid his wife during widowhood, and after her death or remarriage the property is to be equally divided among his children, failing whom testator bequeaths it between his brothers, James Edwin and George, or their heirs. The testator directs his trustees to pay his mother not more than 25*l.* per annum.

The will (dated September 15, 1880) of the late Mr. John William Carrington, Hall Place, Paddington, druggist, who died March 24 last, was proved in London, on May 8, by the executors and trustees, Messrs. F. E. Soper, 33 Lower Seymour Street, and F. Baker, formerly of 119 Fife Lane Road, N., but now of Friem Barbet. The gross personal estate amounted to 3,335*l.* 15*s.* 2*d.*, and the net to 3,291*l.* 0*s.* 2*d.* The testator bequeaths his furniture, household effects, plate, &c., to his widow, and also the income arising out of his estate for her life, with remainder to such children of his brothers, Frederick Charles and George Thomas, as may be living at his widow's death. To his daughter, Mrs. E. R. Griffith, he leaves 200*l.* By a codicil (dated April 3, 1884) he testator leaves his executors twenty-five guineas each.

Letters of administration were granted on April 6, 1888, of the personal estate of the late Mr. John Davies, chemist and druggist, of Llanybyther, who died March 1 last intestate, to Mrs. S. Davies, the widow, she having first been sworn to administer. The gross and net effects were declared under 17*l.*, with no leaseholds. The sureties are Mr. R. Evans, chemist, Lampeter, and Mr. D. Thomas, accountant, Lampeter.

The will (dated July 5, 1881) of the late Mr. William Dolman, chemist, of Everton House, Cheltenham, who died March 24 last, was proved at Gloucester, on May 2, by the widow, Mrs. Sarah Dolman, and Mr. G. H. Palmer, of Cheltenham, the executors. The personal estate amounted to 4,452*l.* 8*s.* 1*d.* The testator gives 11 Brandon Terrace to his wife for life. He directs the trustees to temporarily carry on, by means of a competent manager, his business until they can sell it to advantage. His real and personal estate is to be sold at the discretion of the trustees, and the proceeds invested for the benefit of his widow for life, and at her death to be equally divided among his children.

The will (dated December 23, 1887) of the late Mr. H. B. Firman, chemist and druggist, formerly of Salisbury, who died at Exmouth on March 26 last, was proved in London on April 20, by Mrs. M. A. Firman, the widow and sole executrix, to whom the testator bequeaths the whole of his property, whether real or personal, and whom he appoints guardian of his child or children. The gross personal estate amounted to 442*l.* 5*s.*, and the net to 340*l.* 10*s.* 10*d.*

The will (dated December 22, 1887) of the late Mr. Henry Gill, formerly chemist and druggist, of Ranmoor Terrace, Sheffield, who died on March 10 last, was proved at Wakefield, on April 10, by Mrs. Sarah Gill, the widow and sole executrix. The gross value of the personalty amounted to 691*l.* 0*s.* 8*d.*, and the net value to 351*l.* 0*s.* 8*d.* The testator bequeaths the whole of his real and personal estate to his widow for her absolute use.

The will (dated September 30, 1884) of the late Mr. George Quedsted, of St. Mildred's Lodge, Westgate, formerly chemist and druggist, who died April 6 last, was proved at Canterbury, on June 23, by the widow, Mrs. Rebecca Quedsted, and Mr. R. E. Pottinger (testator's brother-in-law), the executors. The testator devises his freehold house, 20 Market Place, Margate, subject to the payment of 40*l.* per annum each to his sisters, Mrs. S. A. Baker and Mrs. A. C. Hudson, to his widow for life, with remainder to his daughter, Miss G. E. P. Quedsted. He also devises St. Mildred's lodge to his widow for her life, with remainder to his son, Mr. E. L. P. Quedsted. The testator directs that the income arising from his estate shall be paid to his widow for her life, and upon her death the property shall be equally divided among his children. The gross personalty amounted to 3,655*l.* 2*s.* 1*d.*, and the net to 3,410*l.* 18*s.* 8*d.* The testator bequeathed his brother-in-law and executor, Mr. R. E. Pottinger, a legacy of 20*l.*

The inventory of the personal estate of the late Mr. Richard Raimes, of the firm of Raimes, Blanshard & Co., wholesale druggists, Edinburgh, has been recorded in the Commissary Court books of Edinburgh, the amount, exclusive of debts, being 47,055*l.* 15*s.* 8*d.* By his will, dated September 13, 1880, Mr. Raimes directs his trustees to hold two sums of 10,000*l.* each for behoof of his daughters Elizabeth and Maria in life-tenant, said sums, in the event of their marriage, to be settled on them and their husbands in life-tenant, and absolutely on their children. He also directs his trustees to pay to the trustees acting under each of the marriage contracts of his daughters Isabella and Jessie 5,000*l.*, to put these daughters, with the 5,000*l.* already settled on each, on an equal footing with his other daughters Elizabeth and Maria. To his son Richard he bequeaths his shares in the London and Edinburgh Shipping Company, the Scottish Wharf Company, the Leith Corn Exchange Company, the York Corn Market Company, Edinburgh Tramway Company, Edinburgh Heritable Security Company, Scottish Union and National Insurance Company, and in the Scottish Newspaper Company; the seats in North Leith Church, fen duties or other heritable property at Lixmont, his whole estate heritable and movable in Ceylon, and also his estate of Wheldrake, in Yorkshire, it being his wish that this estate should always be in the possession of one of the family bearing the name of Raimes. The remainder of his means he directs to be realised and divided equally between his sons John and Richard, which, having regard to the advances made to John, will, he considers, put them on an equal footing. The whole bequests are made on the express condition that the beneficiaries are to remain in the Protestant faith, and are to be forfeited otherwise. By a codicil dated December 22, 1884, he directs his trustees, instead of paying the above 5,000*l.* provisions to the marriage trustees of his daughters Isabella and Jessie, to hold these sums themselves, and apply them as directed in the will; and by a codicil dated March 29, 1886, these provisions are cancelled in respect of his having settled similar sums on these daughters by a separate deed. By the last codicil to his will, dated September 14, 1887, he appoints his son Richard sole residuary legatee on account of the death of his son John.

The will (dated June 20, 1885) of the late Mr. C. T. Scaife, chemist, of Worksop, who died March 30 last, was proved at Nottingham, on May 9, by Mr. T. Hancock, the sole executor and trustee. The testator leaves 200*l.* to his sister, Mrs. Appleton, with the household furniture and effects, &c., and after bequeathing small legacies to others, including 10*l.* to his executor, he directs the residue of his estate to be equally divided between his nephews and nieces upon their attaining the age of twenty-one years. The personalty amounted to 1,556*l.* 6*s.* 1*d.*, and there were no deductions or leaseholds. By a codicil (dated December 18, 1886) the testator bequeathed a legacy of 100*l.* to his assistant, Mr. Robert Moore.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 9.

THE August Bank Holiday has interrupted such life as remains in the drug and chemical markets for the better part of the week, and there are no changes of importance whatever to chronicle since our last report. No spice or dry-saltary sale was held this week, and the drug auctions were almost devoid of interest. Ipecacuanha has made a further advance privately, and for senna very high prices are paid. Russian anise, fenugreek seed, opium, and galangal root are also dearer, and holders of senega root are very firm. Musk sold very well to-day, fine civet is almost unobtainable, and from Italy comes a report of a further advance in oil of bergamot. Opium is also slightly dearer, while gentian, Turkey gum arabic, cascara sagrada, and nux vomica bring full rates. As a set off, HIGH peppermint oil must be quoted weaker, and for otto of rose lower prices are anticipated; in some quarters orris root and cumin seed are also weaker. In fine chemicals the market is practically unchanged, with the exception of caffeine, which has become decidedly cheaper. Quicksilver and mercurials, borax, and refined camphor are also weak, while cream of tartar citric and tartaric acid have failed to improve. Quinine is practically a dead letter. Morphia is very firm, with a good inquiry. Sulphate of copper has improved just a shade, and among heavy chemicals bleaching-powder is looking up a little. Drysalteries are very quiet, shellac being only a retail article just now, but the improvement in gambier is fully maintained. Turpentine and linseed oil have recently improved, and at Liverpool castor oil is reported in better demand. On the other hand, rape and palm oil are cheaper. A large business in Zanzibar cloves and pimento, at hardening prices, is reported.

TO-DAY'S DRUG SALES were remarkable in one respect only. They contained the fewest number of catalogues (10) since twenty years, the smallest number of lots, viz. 593, since twenty-five years, and they probably represented by far the smallest aggregate monetary value offered at any drug sale within the recollection of the oldest frequenter of the sale rooms.

THE FRENCH BOARD OF TRADE RETURNS, unlike our own, are the reverse of satisfactory. For the six months from January 1 to June 30 the imports and exports into the territory of the Republic, as compared with the first half-year of 1887, have been:—

	Imports		Exports	
	1888	1887	1888	1887
Alimentary produce, frs	697,499,000	667,866,000	297,855,000	329,197,000
Raw material for the industries ..	971,599,000	1,010,964,000	328,203,000	327,483,000
Manufactured goods, ..	273,607,000	264,057,000	795,696,000	797,538,000
Other articles ..	54,045,000	53,011,000	94,347,000	89,936,000
Total ..	1,996,750,000	1,995,898,000	1,516,101,000	1,544,154,000

The imports, therefore, show a very small increase, viz., 852,000 francs, and the exports a considerable decrease, amounting to 28,073,000 francs. It is especially noticeable that in manufactured goods the imports from abroad have increased by 7,550,000 francs, while the exports under the same head have fallen by 1,887,000 francs. French industries have also bought 39,365,000 francs' worth less of raw material for their requirements.

THE BOARD OF TRADE RETURNS for July again show a decided improvement in our foreign trade as compared with the corresponding month of 1887. We imported last month 30,706,412*l.* worth of goods from abroad, against 28,958,156*l.* in July, 1887, an increase of 6 per cent. The branches in which the greatest increase has taken place are alimentary produce, metals, and manufactured goods, but of raw materials we received nearly 10 per cent. less than in July, 1887. Our exports of British and Irish produce and manufactures have advanced from 19,181,395*l.* to 20,762,178*l.*, or 8½ per cent., the increase in the aggregate exports of manufactured articles, excluding yarns and metals, alone being nearly 17 per cent. Our re-exports of foreign and colonial produce have advanced from 5,541,604*l.* to 6,511,391*l.*, or 17½ per cent.

CABLEGRAMS TO AMERICA.—The tariff war which has prevailed for over two years between the American cable companies, greatly to the advantage of the public, has been brought to a close, and a rate of 1*s.* per word to New York, Boston, and Canada will be adopted by all companies. This rate takes effect on September 1 next.

THE MERCHANDISE MARKS ACT.—An influential deputation waited on the Prime Minister on Tuesday to call attention to the injury inflicted on British industries by the delay in extending the Merchandise Marks Act to British colonies and dependencies, and in obtaining the enactment of similar legislation in foreign countries. Lord Salisbury, in reply, stated that the Government had obtained the assent of the majority of the colonies to the principles embodied in the measure, and in several of the Crown colonies legislation had already been effected on the subject. There had been some delay in the case of India, but the matter would now be pressed upon the attention of the Indian Government.

THE GERMAN EXHIBITORS AT BRUSSELS are in a state of great indignation at the alleged dishonourable practices of the German Commissioner, who at the same time holds the position of chief inspector of the exhibition. This gentleman, a former Premier-Lieutenant in the Prussian army, is charged with having abused his position by black-mailing German exhibitors, by favoritism in the matter of allotments of spaces, by the publication of circulars containing untrue statements, and by extorting money by means of catalogues published under his direction. Nearly 200 of the German exhibitors, including Messrs. Schimmel & Co., of Leipzig, B. Jaffé & Darmstaedter, of Martinikrfele, H. Trommsdorff, of Erfurt, Eugen Dieterich, of Helfenburg, and J. D. Riedel, of Berlin, have combined for the purpose of counteracting the alleged favouritism. They have issued a circular to all exhibitors, calling upon them to disregard all instructions issued by the chief inspector, and to refuse payment of all money claimed by him until the accounts have been found correct after examination by a committee of the exhibitors.

ACID (OXALIC) offers at 3*d.* per lb. with next to no business.

ACID (TARTARIC), neglected, at 1*s.* 5¾*d.* to 1*s.* 5½*d.* for foreign. It is said that some English acid was sold in second hand at 1*s.* 5¾*d.* per lb. this week, but we have not been able to confirm this report.

ACIDS (CITRIC), unaltered, at 1*s.* 7*d.* per lb., the return of the warm weather having not so far exercised any influence on the price of the article. At the auctions to-day 12 kegs (each 5 cwt. of Lawes' brand) were offered for sale, and 1*s.* 5½*d.* net cash was bid for the first lot, equal to, say, 1*s.* 6¾*d.* usual terms. This offer was refused, and the lot bought in at 1*s.* 8*d.* per lb. nominally.

ALOES.—Really fine qualities of all varieties are in request at the full rates, but remain scarce. Medium and common aloes on the other hand are in plentiful supply, and can only be sold at a sacrifice. At to-day's auctions 55 cases *Cape* were offered, of which 45 sold at unchanged rates, 20*s.* 6*d.* to 21*s.* for good hard bright, just a little drossy; 16*s.* to 17*s.* 6*d.* for drossy and soft; and down to 9*s.* per cwt. for common dull or soft. *Curaçao*, neglected. No less than

724 packages, mostly small gourds, were placed in sale to-day, but only a few lots were disposed of, at 24s. to 25s. for lark liver. The gourds are limited, it is said, at 30s. per cwt. *Zanzibar* and *Socotrine* aloes unaltered; fairly good quality bought in at 6l. 10s. nominally.

AMBERGRIS.—Only four packages, not of the best quality, were offered for sale, and all of this was bought in.

ANISE.—*Russian* seed is again firmer, and the old stock is nearly all disposed of. For good quality 23s. is required, but the finest grades bring considerably more than that. *Italian* seed also dearer, at 40s. to 42s. per cwt. for good new. *Star anise* scarce. Twenty cases genuine but very broken China were bought in to-day at 90s. per cwt. nominally.

ANNATTO, dull. A few barrels fairly good dry Ceylon seed were shown, and for this 2d. per lb. is asked, which is about the market price at present.

ANTIMONY.—For 100 boxes *Crude Japanesc*, 23l. 10s. per ton is named as the price.

ARSENIC remains very firm, at 12s. 6d. to 12s. 9d. per cwt. for best white powder, and 22s. 6d. for lump.

BALSAM PERU is still cheap, and it is claimed that it deserves attention at present, the stock being now reduced to a small compass. At to-day's auctions 4s. 2d. per lb. was refused for 2 cases, a penny more being asked.

BLEACHING POWDER steady and dearer for hardwood, which is scarce. London quotes 8l. 5s.; Tyne, 7l. 7s. 6d. to 7l. 10s.

BORAX remains very quiet, though the English refiners still hold at 30s. per cwt. In Italy prices are falling, *Boracic acid* offering on August 1 at 23s. per cwt., f.o.b. Leghorn, prompt or forward delivery.

BUCHU in large supply, and obtainable at very low rates. For 10 bales fairly good round leaves, 2d. per lb. was named as the price, and a good parcel of long leaves was also shown, but both were bought in.

CAFFEINE has been much reduced in price lately owing to competition between the foreign and English manufacturers. It is now quoted at 15s. per lb.

CAMPHOR.—Nothing is doing in *Crude*, which is nominally held at 80s. per cwt. for Japanese on the spot. *Refined* camphor is somewhat easier, and it is said that a German firm of refiners are underselling their competitors, notwithstanding the combination which has been formed among the German manufacturers.

CANARY SEED remains quiet, and holders are inclined to give way. The quantities of Turkish seed held over from last season are, however, unusually small. Of new seed nothing has come to hand yet save small sample parcels from Morocco. From the River Plate about 1,500 bags of seed were entered, and sold away directly on landing for exportation; the price realised for that description will probably not encourage large shipments from that quarter. The Dutch crop will be late and probably in worse condition than that of last season. *Turkish* seed is held at 39s. 6d. to 46s. per 64 lbs.; *Dutch*, 43s. to 47s.; *English*, 40s. to 41s.; *Morocco*, 6s. to 48s.; and *Spanish*, 48s. to 53s. per 464 lbs. ex warehouse.

CANELLA ALBA in good quality is very scarce; a few medium or ordinary lots occasionally offer at the auctions, and are quickly sold at good prices. Thus to-day, of 0 packages one lot very broken bark of fair colour sold at 0s. per cwt., while 17s. is named as the price of dark mixed and damaged quality.

CANNABIS INDICA.—Three cases, each of 80 lbs., very good selected herb in bundles, but very brown, were bought in at 8d. per lb., 6d. being found unacceptable.

CANTHARIDES.—Three cases good but old crop *Russian* are firmly held at 4s. 9d. per lb., the broker refusing to accept 4s. 8d. per lb. *Chinese* cantharides abundant but almost unsaleable. The quality of most of the lots offered leaves much to be desired.

CARAWAY SEED is quoted higher, the new *Dutch* crop, although rather large, being of inferior quality. It is held

at 24s. to 26s. per cwt.; but for good old seed, to which attention is now again being directed, 28s. per cwt. is required.

CARDAMOMS.—Only 45 packages were placed in sale to-day, and partly sold without much alteration in values, fine Malabars going cheap, but medium qualities bringing full rates. *Ceylon Malabar*, good medium to bold pale and round realised 1s. 9d. to 1s. 11d.; small to medium good plump, 1s. 4d. to 1s. 6d.; yellow and split, 1s. 3d.; dark and specky, 8½d. to 11d. per lb. *Mysore*, medium long grey, slightly mouldy, 1s. 4d.; dull ditto to small yellow, 10d. to 9d. per lb.; and fair pale seed, 1s. 2d. per lb.

CASCARA SAGRADA.—About 15 cwt. were offered to-day (in three bales). They are held at 60s. per cwt., which is probably very near the market price, 56s. per cwt. being refused.

CASSIA FISTULA.—Fine pods are not offering, but 26 bags of lean and wormy ones sold at 6s. 6d. per cwt., and for 28 cases Java pulp, about 4,256 lbs. (imported eighteen months ago *via* Holland), 12s. per cwt. was paid.

CASTILE SOAP remains very quiet. Fine white *Conte* in cakes, 41s. 6d. to 42s.; in bars, 37s. 6d. to 38s.; green, 21s. 6d. to 21s. 9d.; and mottled, 17s. 6d. to 19s. 9d. per cwt. f.o.b.

CHAMOMILES.—Last season's crop now offers at somewhat easier rates in anticipation of the coming new Belgian flowers. At to-day's auctions a lot of fairly good medium-sized flowers was bought in at 80s. per cwt. nominally.

CINCHONA.—Several parcels of South American bark were offered to-day, including 101 bales *Lima*, which sold very cheaply, at 2d. to 2½d. per lb. for sound fairly good mossy, and ½d. to 2d. per lb. for damaged bark. The whole parcel weighed 9,305 lbs. Good grey *Huanoco* quill brought 1s. 4d. per lb., damaged ordinary ditto, 9d. per lb. Five bales non-descript bulkings were also disposed of at 3½d. per lb. The shipments of cinchona from Ceylon during the period between October 1 and July 12, 1887–88, have been 9,183,039 lbs.; 1886–87, 11,753,000 lbs., a deficiency this season of 2,569,000 lbs. The arrivals of bark from the interior are also declining, having been from October 1, 1887, to June 24, 1888, 3,402 tons, against 4,735 tons during the same period of 1886–87. The German Consul at La Paz in Bolivia states that the Bolivian Government, in accordance with the expressed unanimous wish of the cinchona planters, have abolished the export duty of 3½ bolivares per quintal (46 kilos.) on cinchona bark, a measure which at the time we announced in THE CHEMIST AND DRUGGIST. The Consul adds that for some time the exports will in all probability be enormously heavy, as the planters had caused large supplies to accumulate in anticipation of the abolition of the duty.

CIVET is again reported dearer, and for the best quality as much as 25s. per oz. is asked, but less would buy pretty good stuff.

COCULUS INDICUS.—Of sixty bales good garbled quality, twenty were sold at 8s. 9d. per cwt., at which price the remainder may also be had.

CODEIA sells fairly well at 12s. to 13s.

CONDURANGO.—Of 135 bales condurango, mostly of inferior quality, a part was sold at from 2d. to 6½d. per lb. for very low. A better parcel is held at 1s. 2d. per lb., 1s. being refused.

COPPER SULPHATE firm, at 20l. to 20l. 5s. for first mint.

CREAM OF TARTAR steady at the recent decline; first white at 115s. to 116s., seconds at 112s. to 113s. per cwt.

CUBEBS.—We received this week consignments of 22 bags per *Telamon* from Singapore, and 6 bags per *Quetta* from Batavia. Our own market remains quiet, but firm, and up to 27l. per cwt. for good genuine berries. None were offered at the sales to-day.

CUMIN SEED quiet, and obtainable at 38s. per cwt. for new *Maltese*. At the auctions several parcels of *East Indian* and *Mogadore* seed were offered, but all bought in above value, except 11 bales common *East Indian*, which sold, without reserve, at 20s. per cwt.

CUTCH quiet and unchanged, with but little demand, only retail sales of *Star B* at 31s. per cwt. spot being reported.

DRAGON'S BLOOD.—Only one case dull blocks, not of very good colour, sold at 6*l.* per cwt.

ELATERIUM.—The demand has quite subsided now, but at to-day's auctions 100 oz., partly of very ordinary quality, were again brought forward, and bought in at nominal rates.

ERGOT OF RYE remains very neglected. Only 7 packages were offered to-day, and of these 3 bales good *Spanish* were bought in at 1*s.* 3*d.* per lb. For thin *Russian* 11*d.* per lb. is asked.

EVODIA.—At to-day's auctions 9 bales, weighing about 5½ cwt., of evodia fruits (*Evodia fraxinifolia*) were offered for sale, but no bid was made for them, and they were consequently withdrawn. The fruit, which is of a dull grey colour, and consists of four carpels united at the base, somewhat resembling star anise in size and formation, was fully described in THE CHEMIST AND DRUGGIST of March 24 last, and it is believed that the parcel offered to-day is the same from which the samples were derived that were described in that issue. Evodia oil has been recommended as a deodorant for iodoform, but it has fallen rather flat as a new remedy, and it is said, in fact, that the oil which is really useful for that purpose is derived from another and similar fruit (*Xanthoxylum Hamiltonianum*), so that the parcel under notice would be of no commercial value in any case. The fruit grows in British India.

FENUGREEK SEED.—In good demand at improving prices, and expected to go dearer on account of the probable increased demand for it as a cattle spice. Fine *Mogadore* is worth 9*s.* 6*d.* to 10*s.* per cwt. now, *Egyptian* 6*s.* 6*d.* to 7*s.* 6*d.* per cwt. At auction 126 bags rather stony *Mogadore* were bought in, 2*s.* per cwt. being suggested.

GALANGAL.—Higher prices are asked, 10*s.* per cwt. being named as the price of good bright root at to-day's auctions.

GAMBIER again dearer for forward delivery. *Block* is reported to have been sold at 25*s.* 9*d.* to 26*s.* on the spot, and at 24*s.* 9*d.* for near at hand. It is also said that in Liverpool 27*s.* per cwt. has been paid for near at hand stuff, but this does not seem likely. Fair *Cubes* on the spot are worth 34*s.* 6*d.* per cwt., but for arrival there is no quotation, as the new cubes are said to be so inferior that the Singapore shippers refuse to guarantee quality.

GAMBOGE in good demand at unaltered prices. Three cases broken pipe of fair colour sold at 9*l.* 15*s.* per cwt., while 11*l.* is asked for 5 cases of cakey and broken pipe of good orange fracture.

GENTIAN ROOT remains rather scarce in Italy, and the firmness of holders somewhat checks business. At to-day's auctions 10 bales of fair, but not exceptionally fine quality brought 16*s.* 6*d.* per cwt.

GLYCERINE.—Makers remain firm at 63*l.* for double distilled, 1·260 sp. gr.

GUM ARABIC.—There was a rather large supply of *White Mogadore* gum at to-day's auctions, a variety much sought after because of its large proportion of fine white gum, and consequently commanding very high rates. There were altogether 36 packages of this gum. A few of these were said to have been privately sold. Two casks very good frosty realised 9*l.* 2*s.* 6*d.* per cwt., the same price as at the preceding sales, and the rest was bought in, slightly reddish mixed being limited at 8*l.* 15*s.*, and an offer of 8*l.* 12*s.* 6*d.* being declined. *East Indian Amrad* small and dark mixed sorts bought in at 6*l.* For 5 casks small partly red *Mogadore* Amrad 75*s.* was refused. Fine selected *Turkey* gum is still held at extreme rates.

GUM BENJAMIN.—The supply, as usual, was a very good one, amounting to 116 packages all told. Fine *Siam* almonds were not offered to-day, but ordinary dark partly woody and blocky grain was bought in at 8*l.* to 10*l.* per cwt. Some fairly good *Sumatra* seconds were placed in sale, but there was no anxiety to buy, and only 8 cases sold cheaply "without reserve," at 8*l.* 10*s.* to 9*l.* for good pale almondly seconds, brown bordered.

GUM EUPHORBIIUM.—For 7 serons rather dusty sorts, mixed with fairly good pieces, 25*s.* was refused, and the parcel bought in at 35*s.* per cwt.

GUM MYRRH, quiet, but steady, with small sales, at 90*s.* to 92*s.* 6*d.* per cwt. for fair Aden sorts. There is plenty here.

GUM TRAGACANTH.—The new crop is just commencing to arrive at Smyrna. Our report of June 30, to the effect that the crop this season would be smaller and of less good quality than last year, is fully confirmed.

HONEY.—Three barrels thin brown *Jamaica* sold at 22*s.* 6*d.* per cwt. From Liverpool an improved demand for *Chilian* honey is reported, with sales last week of 250 barrels, third to first pile, at 20*s.* 6*d.* to 30*s.* per cwt.

IODINE unchanged and quiet. *Crude* sells at 9*d.* per oz., *Resublimed* at 13*s.* 6*d.* per lb., and *Potassium iodide* at 11*s.* per lb.

IPECACUANHA.—Only 3 bales were offered at auction to-day, and bought in at very high rates, no offers being made. Privately a very good demand has existed, and it is said that our stock in the first hand has now fallen to 6 serons only, although the official stock-list reports a higher figure. For selected root 10*s.* per lb. is asked, and from 7*s.* 6*d.* to 8*s.* per lb. for fair annulated natural root.

JUNIPER BERRIES.—The crop which is now coming to market in Italy is said to be a good one, but most of it has already been secured by certain speculators. A good business is being done at the rate of 8*s.* per cwt. f.o.b. Leghorn.

MERCURIALS quiet, at last week's quotations.

MORPHIA.—The manufacturers report a very good demand indeed at their price of 4*s.* per oz.

MUSK.—Although only six caddies *Tonquin* musk were offered at to-day's auctions, there must yet be a fairly good supply in the warehouse, as arrivals have come in pretty steadily of late. Four caddies first pile of very fine quality, medium to bold, dry, well-trimmed, thin blue skin and under skin, sold very well indeed, at 80*s.* to 81*s.* per oz. For another caddy, not so good, 76*s.* was refused. Several parcels *grain* musk were also disposed of; good red *Nepaul* at 40*s.*; *Calcutta* at 25*s.* 6*d.* to 55*s.*; rubbish at 4*s.* 6*d.* to 5*s.* per oz. The exports of musk from the Chinese treaty ports to foreign countries in 1887 were 48,316 ounces.

NUX VOMICA still sells at very full rates, the 45 bags offered to day being quickly disposed of at 12*s.* to 13*s.* per cwt. for sandy and partly dark mixed to good bright silky Bombay.

OIL (CASTOR).—At Liverpool 22½*d.* per lb. was reported paid for good *Calcutta* seconds just before the holidays, and since then more money has been asked. Our own market shows no change, and of 355 cases offered by auction to-day only 40 good mostly pale *Cocanada* sold at 2½*d.* per lb. Fine *Italian* and first *Calcutta* bought in at 4¼*d.* per lb.

OILS (ESSENTIAL).—There is very little business doing in this branch, and the alterations reported since last week are small. To-day there is a report that *Bergamot* oil is again dearer in Italy, but we have not confirmed it. *Cassia* dull; 25 cases unworked bought in at 3*s.* per lb. nominally. *Cinnamon*, *Cinnamon leaf*, and *Citronella* unchanged but steady. Of *Lemon* 5 cases were offered at auction, and bought in at 4*s.* to 4*s.* 6*d.* per lb. Our last report concerning the coming crop of *Mitcham Lavender* still holds good, although the hot weather of the last few days has slightly improved the prospect. *Oil of limes* quoted at 3*s.* *Peppermint* oil, American HGH, dull at 12*s.* to 12*s.* 3*d.* per lb. *Oil of rose* unchanged. We hear that the largest Constantinople dealers have not yet bought, as they anticipate lower prices shortly.

OIL (OLIVE).—Quiet, but steady, at 37*l.* nominally for *Spanish*, 34*l.* 10*s.* to 35*l.* for *Sicilian*, and 32*l.* 10*s.* for *Mogadore*. Reports from Naples refer in the following terms to the coming Italian crop:—At Gioja the estimate is one-sixth to one-fourth of a normal crop, while about half an average crop is expected in the other growing districts, or say, between one-third and half-crop on the aggregate, although in view of the absence of spring rains, and prolonged drought in the more fruit-laden districts, it is generally apprehended that the crops will not come to maturity without more or less serious reductions. The present stock of oil at Gallipoli is about 4,000 tuns, and at Gioja it is generally estimated at 12,000 to 13,000 tuns, although it is difficult to

obtain reliable information on this score. At the other places of shipment, as also in the interior, stocks are unusually scanty. On the other hand we hear from Leghorn that the crop prospects in Northern Italy are very good indeed.

OILS (VARIOUS).—*Cocoonut* oil remains quiet, at 22l. to 22l. 15s. for fine Ceylon, and 24l. 10s. up to 27l. for good to very fine Cochín. Mauritius oil nominal. *Cotton* oil shows no alteration at 19l. for crude, and 20l. 10s. for refined on the spot. Hull quotes, spot, 19l. 15s.; November-April, 18l. 5s. to 18l. 7s. 6d.; crude, 17l. 10s. to 17l. 12s. 6d. *Linsced* oil is advancing rather briskly, and closes to-day as follows:—Spot, 18l. 7s. 6d. to 18l. 10s.; month, 18l. 10s. For September-December 18l. 15s. has been paid. January-April quotes 18l. 17s. 6d. to 19l.; Hull, spot, 18l. 17s. 6d. to 19l.; month, 18l. 17s. 6d.; September-December, 18l. 17s. 6d.; January-April, 18l. 15s. *Palm* oil remains lifeless with a tendency towards lower rates, and fine Lagos cannot be quoted now above 20l. to 20l. 10s. *Petroleum* steady, but quiet. American, spot, 7½d. to 7¼d.; September-December, 6¾d. to 6½d.; Russian, spot, 6¾d.; September-December, 6¾d. to 6½d. *Rape* oil has been declining, but closes firm to-day as follows:—Brown, spot, 24l. 5s.; September-December, 24l. 10s.; refined spot, 25l. 10s. to 25l. 15s. *Turpentine*—American spirits have made some improvement to-day, and close at 27s. 9d. for spot and September-December, and 28s. 9d. for January-April.

OPIUM.—The latest reports from Smyrna, dated July 23, are to the effect that extraordinary efforts are being made by a party of operators to run up prices. So far they had succeeded in forcing up ordinary examined opium, new crop, from 7s. 4d. to 8s. 3d. per lb., and they refused to continue selling at the latter price. The general opinion is, however, that the bulls will not be able long to thwart the natural downward course of the article, and, in fact, we hear it asserted that their object is merely to keep up the price until after September 3, for on that date the Dutch Government, according to a statement issued by the Ministry of the Colonies at the Hague, will receive tenders for 500 cases of Turkish opium for Java, 150 to be delivered end of October, 150 end of November, and 200 end of December. The speculators, it is said, hope to keep up the market until the date of adjudication in order to force the Dutch Government to purchase at a high figure, and, this aim achieved, they will be the first to turn round and depress the market for the purpose of buying cheaply. It seems that a minimum crop of 10,000 cases is now assured. The arrivals at Smyrna, up to July 23, were 1,130 baskets, against 159 and 900 at the corresponding dates of 1887 and 1886. The market closed firm, with a rising tendency.

Our market has responded to the Smyrna advance, and prices here have risen about 6d. per lb. for second qualities since last week, although the demand is still lacking in animation.

ORANGE PEEL.—The stock of ordinary qualities is far in excess of our requirements; fair to good small *Malta*, gelatine cut, is held at 8d. to 1s. per lb.

ORRIS ROOT.—Notwithstanding the reports that the new crop will again be a failure, holders in Italy are becoming apprehensive that their excessive demands cannot much longer be maintained, and they are gradually lowering their prices in the hope of clearing off their stock before the new root arrives. At present the nominal prices at Leghorn range as follows: *Florentine* root, fine selected, 46s. to 47s. per cwt.; ditto small and dark mixed, 41s. per cwt.; *Verona*, common to fine, 20s. to 23s. per cwt.

PUMICE STONE.—It now appears that not all the Lipari mine owners have joined the syndicate, which has, therefore, failed in its object of controlling the entire supply. Prices now range from 10s. to 17s. per cwt. for ordinary picked to best picked; and from 8s. 6d. down to 4s. 6d. per cwt. for commoner lots. The volcanic eruption in the Lipari islands is not unlikely to further influence the price of the article.

QUICKSILVER.—The principal importers still refuse to quote, and second-hand holders have gradually been brought to accept lower rates. To-day they quote 7l. 10s. to 7l. 12s.

QUININE dull and without any transaction of importance. There are buyers of German bulk quinine for forward delivery at 1s. 4d. but no sellers, while, on the other hand, second-

hand holders offer spot at 1s. 4d. without finding purchasers. Maker's quotations show no change.

RHUBARB.—Only 52 cases were offered to-day, and of these next to nothing was sold, there being no serious competition. A few cases *Shensi* root, fair flat, dull coated, partly pinky fracture, sold at 1s. 2d. per lb. Per steamer *Telamon* 56 cases arrived from China this week. The total shipments of rhubarb from Chinese ports to foreign countries amounted to 46,218 piculs last year.

SENEGA.—Good bright root is held at 1s. 9d. per lb., and in America prices seem improving, some dealers having stopped selling for the present. At auction two bales chumpy and sea-damaged root sold at 1s. 5d. to 1s. 7d. per lb.

SENNA.—Since last week 177 bales have arrived from Tinnevely, but it is uncertain whether these are the first consignments of the new crop or old parcels kept in stock in India until the last moment. Of 62 bales offered to-day a small quantity belonged to this recent import, and it sold at rather dearer rates, 3¾d. per lb. for medium greenish sea-damaged leaves. The rest of the parcels offered was utter rubbish, and sold partly at ¼d. to ½d. per lb.

SHELLAC.—No public sales have been held this week, and privately we hear of retail transactions only in *Second orange*, TN standard, near at hand, at 41s. c.i.f. terms.

SPICES.—There have been no auctions this week, but there has been a strong demand privately for *Cloves*, and values have somewhat improved. From 6¾d. to 6½d. per lb. has been paid for fair to good bright Zanzibar. *Pimento* has also been in brisk demand, with sales at 2½d. to 2¾d. for fair to good Jamaica.

TEA.—*China* market.—The tea trade, as usual, takes some time recovering from holidays, and there were no sales on Tuesday, and but very little catalogued for Wednesday. On the latter day, however, some business passed privately in Monings, there being a fair demand for good Keemuns and Kintucks from 1s. 2d. to 1s. 4d., and a slightly firmer market. On Thursday common old season's Kaisow and Saryune sold from 3½d. to 4¼d., the recent advance being maintained; New Saryunes and Soomoos from 6¾d. to 10½d. without much alteration; Packlings from 11¼d. to 1s. 1½d.; Pecco Congou—poor liquor and tolerable appearance—1s. 2d. and 1s. 3¼d.; and Lapseng Souchong, 10¾d. and 1s. One or two good leaf Ningchows, in appearance more like second crop teas than first, fetched 9½d. to 10½d.; but there is not much Moning being sold in public sale, and holders as a rule do not appear very eager to sell. Unless, however, there should be a very large demand for shipping, we do not see any reason to anticipate a permanently dearer market for Monings in the face of the Indian and Ceylon teas coming forward. New Kokew and Formosa Oolongs in sale on Thursday sold slowly from 8½d. to 11d., showing very fair value to buyers. *Indian* teas were in fairly large supply in the Thursday auctions, and sold steadily without any alteration to note. There are many good useful Pekoe Souchongs and Pekoes to be bought from 7½d. to 11d., and these are worth attention, being sound serviceable teas for general use. Fine teas are not plentiful, and anything really choice fetches a long price. Broken Pekoes from 10½d. to 1s. 1d. are cheap, and some very handsome new teas have been sold within these prices, being readily taken in the country. *Ceylons* are steady, the demand being fully equal to the amount offering, and most useful teas are taken readily at previous rates.

WAX (BEES).—A good demand still exists for *Jamaica* wax, which sold to-day at 6l. 2s. 6d. for good yellow, 5l. 15s. to 5l. 17s. 6d. for orange, and 5l. to 5l. 10s. for brown and grey mixed. Four casks fair *Mogadore* also sold at 85s. per cwt.

COCAINE has, according to Dr. J. Brown, been used in dentistry to deaden the sensibility of the exposed pulp. The pure alkaloid is preferable to a salt for this purpose, because, being less soluble in water, it is less liable to be washed away by the saliva. A strong solution in oil of cloves is also useful.

THE AMERICAN MARKETS.

NEW YORK, July 20.

THERE are few features to report this week. The market has been fairly steady, with a little weakness in the two most prominent articles, opium and quinine, and a tendency of one or two others the other way. There is a disposition every now and again manifested to push up some article to what its proper level should be, but for a long while back it has been impossible to sustain the price of anything for any length of time. Nothing seems to hold, there is no backbone to anything, and this is likely to continue at least until the tariff question is settled one way or the other. Of this there are some signs this week, the discussion having been closed yesterday in the House of Representatives. Thus the end is drawing near, and when it has come there is every reason to look for much more stability in business, a more certain basis to work upon, and a consequent greater firmness when advances do occur. A much more satisfactory condition of affairs than has for some time past prevailed is therefore anticipated in future.

ACID (CITRIC).—There is no change in the position of this article, either foreign or American being obtainable at 50c., less 10c. duty (1s. 8d.).

BALSAMS.—*Copaiba*: Central American has become quite scarce within the past fortnight; the price has advanced to 48c. (2s.), and remains very firm. *Pará* and *Angostura* remain about the same as quoting for some time back, the former 60c. (2s. 6d.) and the latter 55c. (2s. 3½d.). *Tolu* is worth 23c. to 30c. (1s. 2d. to 1s. 3d.); *Peru*, about \$1.10 (4s. 7d.); *Canada Fir*, \$3 (16s. 8d.), and *Oregon ditto*, \$1.10 (4s. 7d.).

BROMIDE OF POTASSIUM still remains at the same figure, 33c. (1s. 4½d.) in 1,000-lb. lots.

CUBEBES are firm at recent advanced quotations, \$1 50 to \$1.75 (6s. 3d. to 7s. 3½d.), the former for ordinary stemming, the latter for prime suited and stemless.

GUM ASAFOETIDA continues about as last reported, 9c. (4½d.) for prime pure gum, with a fair jobbing demand. We have had considerable quantities of poor gum on the market for some time, stony, dirty, and undesirable, which has been gradually worked off, and good clean gum, and the only gum wanted here, is mainly offering and finds ready sale.

LYCOPodium has further advanced, and is now steady at 40c. (1s. 8d.), with an upward tendency, and growing scarce.

OILS (ESSENTIAL)—The general market is quiet, but there is an increasing interest for *Peppermint*, and prices remain firm, with a strong upward tendency. Western holders are asking \$2.05 (8s. 6½d.) to \$2.10 (8s. 9d.), and New York State is held at \$2.35 (9s. 9½d.), and H. G. H. bottled oil, \$3 to \$3.25 (12s. 6d. to 13s. 6½d.). The supply this season will turn out very much below the average, and with a reasonable demand much higher prices may be looked for. *Wintergreen* is firm at previous late advance, \$1.85 to \$1.90 (7s. 8½d. to 7s. 11d.). *Sassafras* is very much in demand, scarce, and worth 50c. (2s. 2d.). Oil of *Rose Geranium* is much higher here, in sympathy with the market abroad, and *Chiris*, the most popular brand here, is held at \$9½ (39s. 7d.) per lb. Other good brands are procurable at \$8½ to \$8.75 (35s. 5d. to 36s. 5d.) as yet.

OPIMUM, as mentioned, is not quite so firm this week, in consequence of recent large arrivals, and is off about 5c. per lb, and selling for single cases at \$2.65 (\$1.65 in bond, 6s. 11d. per lb.), and lots at \$2.60 (\$1.60 in bond, 6s. 8d. per lb.), with a moderate steady jobbing demand.

QUICKSILVER is firm at 57c., duty 10 per cent. (2s. 2d.), with good steady demand.

QUININE has continued steady at the late advance, and a much quieter feeling has obtained. The prices remain about the same, viz., 34c. (1s. 5d.) for good brands, and 35c. (1s. 5½d.) for the better-known and longer-established ones.

ROOTS.—*Ipocaccianha* has still a tendency to further decline, and \$1.50 (6s. 3d.) is the market, but it is inactive and neglected. *Golden Seal* unchanged at 35c. to 40c. (1s. 5½d. to 1s. 8d.). *Senega* is about the same as last reported, 35c. to 40c. *Ginseng*, no change, \$2 to \$2.25 (8s. 4d. to 9s. 4d.), depending entirely upon quality and somewhat on quantity.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Foreigners and the Preliminary Examination.

SIR,—You will perhaps allow me to reply briefly to some of the points raised by the prolix letter of your correspondent, "Quod Erat Demonstrandum," who seems to me to give a quite unreasonable amount of prominence to the case under discussion.

Among English businesses there are only a few which would or can attract German chemists, and these have been always, and will ever be, in the hands of people of that nation. The reason of the association of the Teuton with these businesses will be found in the fact that the customers are German-speaking, so that the whole routine of the daily duties could almost without exception be gone through by those absolutely ignorant of English.

That the Preliminary examination is probably the most trying for the German candidate there can be little doubt; but its difficulty lies not in the standard of excellence required in the various subjects, but in the main character and genius of the examination itself. It makes it essential for the German student to "hark back" to his juvenile days, and get up a precise acquaintance with subjects which are laid before the expanding intellect of youth not so much because of their intrinsic value or importance, but principally as factors in mental training.

In the particular case adduced, the business which the applicant desires to conduct is purely German in character, and this being so, can any just reason be brought forward why the Preliminary examination should not be discarded upon the evidence of sufficient testimony to the soundness of the education required? Your correspondent seems to be partly ill-informed and partly misleading. Although the German "gymnasias" are doubtless of higher scholastic rank than the "Realschule," yet it is in the latter that English is more thoroughly taught. In the former institutions more prominence is given to the classical languages, Latin and Greek; English is an optional subject, and one by no means frequently taken up.

As to the quotation from the *Pharmaceutische Zeitung*, your correspondent makes it appear, intentionally or unintentionally, that the views expressed are those of that paper itself. Such is, in fact, not the case, the passage conveying merely an individual opinion; and even if I myself do not agree in all particulars with the writer quoted, I am not the less convinced that in certain circles of English pharmacy higher education is still much wanted. This part of the letter, however, is quite *ex parte*.

With regard to the retaliation that foreigners are not admitted into German pharmacies under similar conditions, I need only point out that this results not from a conservative spirit in the German society corresponding to the B.P.S., but from the fact that pharmaceutical legislation is purely and entirely Governmental, whence no exceptions to the regular methods of procedure can be made by the society referred to, even if it were so desired.

That it is not anticipated or hoped by the Germans that they will be able to "invade England" and ruin "whole branches of industry" (to use "Q. E. D.'s" hysterical terminology) may be inferred from the following extracts from

of my "Briefe aus England," which your correspondent appears to have overlooked:—

"Numerous applications are constantly reaching me as to how one can obtain a situation here, and particularly whether such places are to be come at. I am almost always compelled to give the unwelcome advice not even to make an effort to find such a berth. . . . If I, however, ventilate the question, Can a place in an English pharmacy be successfully found by personal search in England? I am obliged to give a negative as regards the great majority of cases, though the possibility of chance exceptions is not excluded. . . . Touching the final prospects of the 'deutsche Apotheker' who may have the intention of establishing himself here for the future, it cannot be said that they are exactly seductive. . . . It is quite impossible for a German 'apotheker' to pass the qualifying examination and open a business without having previously had a sufficient amount of training in an English pharmacy."—*Pharm. Zeit.* May 19, 1888, pp. 295 *et seq.*

In conclusion, I may express my astonishment that such importance should be attached to the particular case introduced by your correspondent, since similar exemptions have been previously granted without any such public exhibition of national prejudice and puerile indignation.

Yours very truly,

LONDON CORRESPONDENT.

(*Pharm. Zeit.*)

L'Affaire Dunstan.

SIR,—As I ventured to anticipate last week, the consideration of my letter by the Council does not seem to have been brought very prominently under the notice of the reporters, though the fact that it was considered is proved by my receipt of a letter from the secretary, stating that the letter was "ordered to lie upon the table," whence it has probably long ere this gravitated to the Pharmaceutical Society's waste-paper basket.

As the Council therefore declines to take any steps to clear its character, we can only conclude that it—or, at any rate, some portion of it—was aware at the time of the annual meeting that its spokesman was, even if telling the truth, certainly not telling the "whole truth" with regard to "l'affaire Dunstan," and much as we must admire the manner in which the Council has read, marked, learned, and inwardly digested the fable of the bundle of sticks, and, moreover, practically applied the moral to its own affairs, I, for one, can only regret that the slur of having supplied misleading information must attach, by its own action, not only to those Councillors or officials who probably were, but also to many whom I firmly believe were not, acquainted with the real facts of the case.

It is also surprising that the Council does not recognise the fact that an apology is, as an ordinary act of courtesy, due to the members for the unsatisfactory nature of the reply given to a question asked at the annual meeting; and I fear its chivalry in connection with this matter will seriously detract from the value placed on the explanations vouchsafed by the President and Council to their constituents on these occasions, and tends to emphasise the fact which has unfortunately become only too apparent, viz., that the Council's only desire in attending this compulsory gathering is to hurry this formal business over as speedily as possible, and not as I consider should be the case, to listen to the opinions and wishes of the members of the Society, or to benefit by any remark or suggestion which may be put forward with a view to improving the working of the establishment in Bloomsbury Square, in whose welfare the humblest member of the Society may feel as great an interest as does any individual possessor of a seat at the Council table.

The indifference as to whether the students get the assistance for which they pay their fees is also sadly calculated to lessen the number of entries in the Society's schools—a fact all the more to be deplored from the really great improvements which are projected in the arrangements for next session; and here again it is to be regretted that the Council is unable to answer that it has secured the first claim on Professor Dunstan's services, and that it intends, whatever engagements he has chosen to enter into elsewhere notwithstanding, to keep him up to his work at the Square.

I will not trespass upon your valuable space further than to thank you for your kindness in allowing this important

matter to be so freely ventilated in your columns, and consequently brought so fully before the members of the Society notwithstanding the efforts of the Council and the powers that be at Bloomsbury Square to keep them in the dark on the subject.

I am, sir, yours, &c.,

42 Castle Street East, W.

EDWARD H. STOREY.

[With this letter we presume the incident is closed, but it will not be easily forgotten. It is not necessary to use any strong language, but we cannot refrain from expressing our surprise that all the members of the Council should have associated themselves with their President in the unfortunate attempt to hoodwink their constituents. We have had several proofs that the gentlemen on the Council are utterly unsuited for diplomacy (we intend this as a compliment), and this last failure of theirs in that line ought to impress the lesson on their minds. The lesson for the members themselves to draw from the little history is too obvious to need enforcement.]

The Walthamstow Case.

SIR,—Permit me to ask old Yorkshire, Liverpool, West-end, and South-Coast friends not to allow me to be confounded with my unfortunate namesake. There are so few of us in the trade with the same surname.

With thanks, yours truly,

Pau, France, August 8. EDWARD ANDERSON BARBER.

The Charge against Mr. Gower ignored by the Grand Jury.

SIR,—Will you kindly insert in your next issue, in justice to myself and the profession, that the grand jury yesterday, at the Clerkenwell Sessions, threw out the bill against me for indecently assaulting a little girl, and also that, had the said grand jury returned a true bill, we had a perfect answer to the charge, and could have conclusively proved that the said charge was brought without the slightest foundation?

Yours faithfully,

113 The Grove,
Hammersmith, August 8.

EDWARD THOMAS GOWER.

Chlorodyne Formulæ.

SIR,—You have done good service in tabulating the various formulæ for chlorodyne, thereby showing at a glance the deplorable variations in composition and strength. The importance of the subject induces me to make further remarks regarding it. I would suggest that preparations of a strength similar to the one given on page 94 of the current CHEMIST AND DRUGGIST be called by some other name than "Chlorodyne." The original preparation is the one the physicians and the public are most familiar with, and it would be quite reasonable on the part of any one of them to use any compound labelled "Chlorodyne" in the manner directed on the label of the original article, viz.:—"From twelve to sixteen years—from ten to twenty drops. . . . Adult dose: From ten to thirty drops in water, to be renewed every three or four hours until relief is effected." My experience is that when chlorodyne is ordered by a physician, he generally merely tells the patient to get it, and to take so much (as a rule, from 20 to 30 drops) for a dose. Consequently it is our rule to sell and dispense what is practically, at least, acknowledged to be the genuine "Chlorodyne," viz., J. Collis Browne's, and I would strongly advise others to do the same. It is a trite remark, but I would repeat it. Do not risk too much for the sake of elegance.

Yours, &c.,

EDINA. (107/45.)

Is a Forward Move Possible?

SIR,—Among the topics suitable for the most earnest consideration of the B.P.C., I venture to say that there is one which would awaken the interest of every chemist who has a personal interest in the trade, but which is not included in the list you have published. It is this—How best to bring before our customers, the British public, the present anomalous position of the drug trade. We are professors of a business

that demands fair education, an examination-licence, and a standing of confidence and respect in the community. Yet we are handicapped by retailers on every side. The craze for cheapness has attracted the enterprise and cupidity of men who enter the avenues of our trade on every side but the sale of poisons. Is it possible to arouse the conscience of the nation to the magnitude of the injustice? Provided this be possible, can we organise ourselves so as to bring the whole moral force of the trade to bear upon our Parliamentary representatives, to induce them to schedule all purely medicinal articles, and to restrict dealing in such to chemists only?

Educate, organise, and schedule. Can we do this?

Yours truly,
HEDER. (109/13)

Pharmaceutical Counsellors.

'Twas Night:—

The druggist had gone with his wife to bed,
Had ceased awhile in the battle for bread;
The tincture bottles had made their bow
To the ointment jars on the shelf below;
Deep darkness stole o'er the varied stock
As midnight struck from the neighbouring clock.
When lo! at a preconcerted call,
The tools of the druggist assembled all:
They met to find in a friendly way
A cure for the trials they bore each day.
And Mr. Pestle, as a sober wight,
They voted should take the chair that night;
Who, standing upright on his stony seat,
Declared he was glad his friends to meet.
"I think you'll agree with what I say,
To do our work we must pound away."
The scale here rattled its brazen pan,
And giving a cough it thus began:
"My friends, you may pound away at will,
And yet be far from your object still.
Of this I am sure, 'tis a capital plan
To weigh your words in the balancing pan."
A dapper measure was seen to try
Some means of catching "the speaker's eye";
But failing, gave vent to a loud "hear, hear,"
In a not unmusical voice and clear;
"Those are my sentiments just to a T,
With Mr. Scale we must all agree."
The crucible here seemed ill at ease,
This logic had utterly failed to please;
In fact, it had only raised his ire,
His sides seemed glowing with latent fire.
So, making his bow to the worthy chair,
"He wanted the ease to be stated fair.
To clear the gold from dross and mire,
There's nothing excels the test of fire."
And so they played at this merry game,
The speakers were more than my pen can name;
There were many pros and many cons,
Like battles-royal between "the dons";
Each had his own and certain cure,
"If 'twas only followed, success was sure."
Like correspondence I often see
In the "letter" column of the *C. & D.*
And so it fell, the very next day,
Each tool went on in its wonted way;
Each filled its sphere, though it were but small,
That made up a daily perfect whole.
And so they filled up the owner's till
By doing their work at his own sweet will.

July 23, 1888.

"SODA CARB.

The Pharmaceutical Society and Cutting Prices.

SIR,—Can anyone furnish a forecast of the Pharmaceutical Society, and need any fears be entertained for its stability through lack of adherents? It seems to me that the past and present aspects of pharmaceutical life in this country justify an observation of this sort. What is the Pharmaceutical Society, setting aside the mandate it holds of the State, which for the present purpose is irrelevant? It is a chartered body organised for the purposes (a) of building up chemists and druggists in a knowledge of the subjects asso-

ciated with their calling, and (b) of extending support to any pharmacist who may stand in need of a helping hand. The query whether it has justified the anticipations of the founders and those who attached themselves to it in later years is best met by pointing to its halls in London and Edinburgh, and to its forty-nine annuitants. Whatever the advantages attaching to the modern principle of business may be, it has one quality which, if I mistake not, will exert a mischievous influence on the welfare of the Society. It has not yet met with unqualified approval, it is at once recognised and ignored. It is this partial recognition wherein lies its badness; one pharmacist charges 4s. 6d. for a proprietary article, while his neighbour is contented with a price which defrays the original cost and leaves only a slender margin. It was this breach of trade etiquette which "struck the note of discord," impaired personal friendship, and deprived the whole pharmaceutical body of much useful purchase. It was this breach which the bystander (I speak not without regret for him) has so often and so erroneously construed into negligence on the part of the Society; and as long as this anomalous condition of things continues the prospects of the Society must be comparatively barren, and its adherents dwindle, or their number remain stationary. Indeed, it can hardly be otherwise; there cannot be unity of purpose manifested out of doors while there exists no general consensus of opinion within, on a matter far more vital to the individual than abstract pharmacy can be. How can any steady-going pharmacist identify himself with me, who have adopted the new rule of business, and am consequently supposed to be set on the road to high estate, while he who has kept to the old methods may have lost his fortune? If he can I beg pardon of your readers for thinking too poorly of our common humanity. Whatever the destiny of the Society may be, it will be found to have been largely controlled by causes akin to these. Very much depends upon the attitude of the individual, upon his good or ill estate; as his prosperity so shall the strength of the Pharmaceutical Society be; nor can it be otherwise seeing that it is an outgrowth of the pharmaceutical body. This being so, I do not think that anyone can regard the past and present aspects of the new movement without discovering both that the Society could not have averted this present state of trade, and that its attitude in relation to it provides little ground for resentment. Many pharmacists have recognised this and have met their losses with an admirable equanimity, contending that it was impossible to resist the popular cry for a "revision of prices," a cry which originated with the people, and had at its back the force of public approval. It is, however, this condition of the trade which threatens the stability of the Pharmaceutical Society, and not till the new system meets with universal approval will pharmacists recover their lost property and the Society see good days again. So long as the new system is approved only by one here and another there, attachment to the Society and interest in its interests will dominate. We cannot blame the pharmacist who adopts the new course; he is only doing as others do, he is "going the way the world is going." But it will be lamentable if the ultimate effect should be that a society founded on liberal principles, and which has given by its example and by its munificence a great impulse to learning, should have to publish a longer register and a shorter calendar each succeeding year.

I am, sir, yours obediently,

W. PUCKEY.

Fixed Glass Stoppers.

SIR,—Your correspondent "Cymro" must try what mechanics will do for his fixed stopper. I have found the following plan most effectual when other methods have failed, but it can only be tried in those stoppers which have a shoulder on each side of them, or something like a shoulder. Obtain four thin *very dry* deal wedges, place two of these (reversed) on each side of the bottle between the stopper and the top of the bottle, and slightly hammer them tight; now wet them, and in a short time the stopper is bound to move.

W. H. C.

DR. MOY TOY YON, the pioneer Chinese pharmacist of Chicago, recently died in that city. Dr. Yon laboriously filled for many years the functions of physician, pharmacist, and laundryman out *yonder*.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.

Vaseline (65/106) would like the opinion of readers on the best method of dispensing the following:—

Ext. belladon.	..	..	..	..	3ss.
Mucil. acac.	..	..	..	..	3vj.
Tere bene et adde					
Etheris	..	..	..	..	3ij.
M. Ft. paint.					

Assistant (65/106) would be grateful if readers would suggest the most satisfactory way of dispensing the subjoined, as he gets a most unsatisfactory result:—

Ext. conii	..	..	..	..	gr. v.
Acid. tannic	..	..	..	..	" x.
Glyco-gelatin q.s.	ut	ft.	pcssus.		

[This prescription may be satisfactorily dispensed by the following process, which must be exactly followed if a transparent article is to be obtained:—Rub the extract down with little water, dissolve the gelatine in water with some glycerine at a water-bath heat; dissolve the tannin in glycerine and add to the warm solution of gelatine. Evaporate to the necessary consistence (as indicated by the character of a beaded drop), and then add the extract and mix all together.]

A. D. (3/109) asks what is the best method of dispensing is:—

Acid. carbolic..	..	..	..	..	gr. vi.
Pil. assafoet. co.	..	..	..	..	" xx.
Ol. cajuputi	..	..	..	..	℞. vj.
Pulv. valerian.	..	..	..	..	q.s.
Ft. pil. vj.					

Turpentine Pills that will not Fall.

In answer to 104/38, X. F. Z. sends the following formula:—

Pul. resinae (amber colour)	..	..	..	..	3ij.
" gum. acaciae..	..	..	..	..	3i.
Proof spirit	..	..	..	..	3iij
Mix and roll.					

Sometimes they require a little warmth whilst rolling.

"Norwich" submitted the following pill query last week:—

Acid. carbolic. pur.	..	..	..	..	gr. j.
Ext. alces Socot. aq.	..	..	..	..	" j.
Pil. gallan. co...	..	..	..	..	" j.
Ext. coloc. co.	..	..	..	..	" j.
M. Ft. pil. j. (arg.)					

U. F. (27/107) says a good way to dispense the pill is to rub up the carbolic acid with about $\frac{1}{2}$ grain of yellow wax, then add the other ingredients. The powdered extracts of aces and coloc. co. should be used. By this means you get a good firm pill. The pills should be sent out in a bottle.

This pill is easily dispensed by using the pil. galbani co. al ext. coloc. co. in powder. The addition of 1 grain of liquorice powder to each pill makes a fairly good mass, which should stand an hour before it is cut.

Yours respectfully,

BOSTONIAN. (110/47.)

Non-Professional Hieroglyphics.

We have a communication in reference to the prescription which we published a facsimile on July 28 from *Mr. C.*

Clark, of Cardiff, who says that he dispensed it sometimes a dozen times a day when he lived "up the hills," for a man known as "Owen the Glyn" (quack). He says it should read as follows:—

Spirits spike	..	..	..	..	3j.
Sweet spirits nitre	..	..	..	..	43
Tinct. steel	..	..	..	..	6 drops
Sulphur of milk	..	..	..	..	4 drachms

Half to one teaspoonful in gin two or three times a day. Slake bottle.

The Concentrated Mixture.

SIR,—It is possible to dispense this, in a modified form, by extemporising the spirit with water instead of S.V.R. and by making the tincture with half water. Then make the bulk so that one teaspoonful should contain one dose instead of two.

Yours truly, HEDER.

SIR,—I was unable to dispense the concentrated mixture as it stood. By the following method I obtained a mixture exactly one-half the strength of that prescribed:—Dissolve the ferri ammon. cit. and potass bromid. in 3 oz. of water, the tinct. nucis vom., and spt. ammon. aromat. Then add 1 oz. of water; the volume of the liquid is increased by the addition of the salts. After standing a short time it separates into two distinct layers, but is perfectly homogeneous when shaken up.

Yours respectfully,

BOSTONIAN. (110/47.)

LEGAL QUERIES.

10/60. *Sunshine*.—A German house sending acknowledgment of money received from England need not use an English receipt stamp. He is not under the jurisdiction of England. If he wants to sue he must do so in England. A foreign court could not enforce its decrees in this country.

18/105. *Enquirer*.—A similar question to yours was answered last week in this section.

56/106. *Juvenis*.—It is illegal for any person not licensed for the sale of spirits to sell pure spirit, whether he describe it as medicated or not. The Board of Inland Revenue will permit chemists to sell 8 oz. of pure spirit at a time to medical or scientific gentlemen for medical or scientific purposes, but this permission must not be abused. No person unlicensed by the Home Office may manufacture coloured fires, and Colonel Majendie has informed us that a chemist's shop would never be accepted as a suitable place to be licensed for such operations. The penalties for infringement of either of these regulations are very heavy. The owner of the business would be the person liable to them, unless he could prove that the transactions were not carried out by his direction or with his cognisance.

27/109. *T.* says:—"B has been managing a drug house for ten years or so, during which time he has introduced several preparations of his own, given them fancy names, and sold them in the name of the firm. If he were going into business for himself, could he advertise them by their present names as heretofore prepared by him for the firm he was managing for, or should he have the names registered? If the names cannot be registered, what had he better do? He holds the recipes." [Unless he has specially reserved the property in those names to himself, a court would most likely hold that they are the property of the firm who have *de facto* sold them. If B were to try to register the titles, the firm could probably successfully oppose such registration by him. B can undoubtedly make the same articles, but it will probably be wiser on his part, and it will certainly be safer and more honourable, that he should not seek in any way to undermine his past employers in respect to the titles.]

40/109. *J. F.*—Neither pharmaceutical chemists nor chemists and druggists are exempt from service as overseers of the poor.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

64/100. Monocarbonate of Ammonia.—Break into small pieces volcanic-carbonate of ammonia (ordinary sesquicarbonate), put into an air-tight jar and pour on it half its weight of liq. ammon. fort. sp. gr. .880, suitably perfumed. It should be kept for two or three weeks, tightly covered, but stirred occasionally with a spatula. This is Allchin's process. After we published this on a previous occasion "Heder" wrote to say that his experience of the article was that it was not worth keeping. He prefers to fill bottles with small pieces of ammon. carb. (rejecting the powder) and moisten with perfumed liq. ammon. fort. His customers say that his smelling salts last longer than other people's. A good perfume for the ammonia is made from the following formula:—

Ol. lavand. Aug.	..	..	..	3iv.
Ess. moschi	..	..	..	3iv.
Ol. bergamott.	..	..	..	3ij.
Ol. caryoph.	..	..	..	3i.
Ol. cinnam.	..	..	..	gtt. v.
Otto rose	..	..	..	gtt. x.

Misce.

5/275. Bayberry.—Composition Essence.—Bayberry root bark, 3 oz.; ginger, 10 drachms; cloves, 4 drachms; capsicum, 1 drachm; carbonate of potash, 15 grains. Having coarsely powdered the drugs, put them with the potash in an infusion jar. Add 15 oz. of boiling water and infuse for two hours; then add 4 oz. of glycerine, digest for a day, filter, and add 1 oz. of rectified spirit. The product should measure a pint.

33/107. Walsall.—Powder for Sweaty Feet.—Powdered starch, 2 oz.; fuller's earth, boric acid, and powdered orris, of each 1 oz. This is a powder which may be recommended to persons who suffer from tender or perspiring feet.

40/274. *Facta non Verba*.—Carbolic Tooth-powder.—

Precipitated chalk	..	..	..	4 oz.
Carbonate of magnesia	..	..	..	3 "
Powdered soap	..	..	..	½ "
Carbolic acid	..	..	..	20 grains
Camphor	..	..	..	20 "
Oil of wintergreen	..	..	..	3 drops
Rose pink	..	..	..	q.s.

Tint the powders with the rose pink and incorporate with the other ingredients, previously rubbed to a fluid in a mortar. Sift.

51/107. *Ann Theridia*.—You will find experience and advice respecting the Major examination in this journal, September, 1885 (monthly), and February 11, 1888.

Insecticide for Plants.

For killing green and black fly, red spider, and other insect-pests on plants:—

Terebene	..	..	..	3ij.
Saponis mollis	..	..	..	3iv.
Spt. vini meth.	..	..	..	3vj.

Solve.

Mix 3j. to 3iv. with 1 gallon water, and either dip plant into the mixture or apply by means of a syringe or spray diffuser.

Vary the strength of the mixture according to the kind of insect required to be removed. Quite harmless.

Musselburgh, August 3.

DAVID S. ANDERSON.

9/109. Soda Water.—We do not think a general discussion on the cost of aerated-water plant can be necessary, seeing that exact particulars and abundant information can be obtained from any of the manufacturers of such machinery.

Messrs. Burrell & Son, Montrose, ask:—"Would any obliging correspondent suggest a mode of colouring show-bottles—8 gallons, on side brackets—without having to fill them with watery solutions? Has anyone ever tried a coloured transparent disc painted on back and front of the bottle?"

19/109. W.—Mahogany Stain.—One of the following formulæ may suit you:—Boil together 1 lb. madder and ½ lb. logwood in 5 pints of water for an hour. Filter, and apply to the wood (already warmed), while warm, with a sponge. The colour can be darkened by applying afterwards a solution of carbonate of potash (1 drachm to 1 pint). (2) Digest 1 oz. powdered turmeric and 1 oz. powdered dragon's blood in 8 oz. strong alcohol until a sufficiently deep colour is obtained. Filter, and apply warm. For Black French Polish "A Practical Man" recommends the addition, to a pint of the best polish, of a tablespoonful of very finely-ground ivory-black and as much indigo as will lie on a shilling. His book on "French Polishing" (published by Wymans) would probably be of service to you.

54/109. Fleming's tincture of aconite should be made by digesting 16 oz. of aconite root with 16 oz. of S.V.R. and afterwards percolating with spirit up to 24 oz. The strength, therefore, of Fleming's tincture would be more than five times that of the B.P., if the root were perfectly exhausted in both cases. One part of Fleming's tincture to four parts of rectified spirit should yield a tincture of about B.P. strength.

32/109. *Celyn* writes:—"A lady has had a skin tanned, but it smells disagreeably, arising, she thinks, from the tanning. Can you suggest anything to remove that unpleasantness?" [Sanitas would be the safest deodorant to try first. If that is not successful a chlorine solution, such as Burnett's, would perhaps answer, but it should be tested first on a small piece to see if it would injure the skin.]

57/109. J. B.—We do not find that anyone has ever attributed any medicinal virtue to the bicarbonate of strontium contained in Vichy water. The proportion does not exceed ¼ to ½ of a grain per gallon. According to Dr. Lauder Brunton, the physiological effect of strontium is a gradual contraction of the blood-vessels, but we do not know that its use has ever been recommended in medicine.

6/106. R. F.—Cryolite is a double fluoride of aluminium and sodium, found largely in Greenland, and employed in the manufacture of alum and of metallic aluminium. *Phenol sodic* is a formula of the French Codex, and is most likely what you mean by *phenol sodique*. Its formula is phenol (carbolic acid), 70 grammes; caustic soda, 30 grammes; water to make 1 litre. *Phenol sodique* strictly means carbonate of soda, and is made by mixing and evaporating in a porcelain or iron vessel 100 parts of soda lye, sp. gr. 1.333, with 70 parts carbolic acid.

38/109. *Minor*.—Many anhydrous substances form crystals, e.g. sulphur, bismuth, &c.

35/109. J. D.—We do not know the nature of the particular hair preparation you name, and therefore cannot tell what kind of a formula to give you.

17/109. A. O.—Naphthalin is one of the most effectual applications to drive away moths. A solution 1 in 10 of spirit may be sprinkled about the store or sticky paper to which naphthalin is attached may be laid about. An old-fashioned remedy is mercury. One part of mercury is rubbed with 2 parts of gum arabic, a little ether being used to reduce the metal. This powder is smeared on gummy paper and laid about.



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Bismuth and Pepsine	...	"	(4 grs.) (4 grs.)	...	"
(4 grs.) (4 grs.)	...	"	*Bismuth, Iron, and Strychnia	...	"
Bismuth, Pepsine, and Quinine	...	"	(4 grs.) (4 grs.) ($\frac{1}{60}$ gr.)	...	"
(4 grs.) (4 grs.) (1 gr.)	...	"	*Iron and Arsenic	...	"
Bismuth, Pepsine, and Steel	...	"	(4 grs.) 3 mins. (Fowler's Solution)	...	"
(4 grs.) (4 grs.) (4 grs.)	...	"	*Iron and Pepsine	...	"
Bismuth, Pepsine, and Strychnia	...	"	(4 grs.) (4 grs.)	...	"
(4 grs.) (4 grs.) ($\frac{1}{60}$ gr.)	...	"	*Iron, Quinine, and Strychnia	...	"
Bismuth, Iron, and Quinine...	...	"	*4 grs.) (1 gr.) ($\frac{1}{60}$ gr.)	...	"
(4 grs.) (4 grs.) (1 gr.)	...	"	Iron, Quinine, and Pepsine...	...	"
			(4 grs.) (1 gr.) (4 grs.)	...	"

* The Ammonio-Citrate of Iron is used in these preparations.

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(Wyleys'), R.	Bismuth, Nit., 2	(Wyleys'). Each pill represents	(Wyleys'). Each pill equiva-		
gr.; Pepsin Porci, 1 gr.; Ferr.		1 fluid drachm of Syrup of the	lent to 5 minims of Donovan's		
Redact., 1 gr.; Strychnin, $\frac{1}{24}$ gr.	3/6	Hypophosphites... ..	Solution	1/8	
Calcii Sulphid. $\frac{1}{16}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1 gr.	1/8	Ferruginous (Bland's), 3 and	Manganese Binoxid Pur., 1 gr.	2/6	
Cascara Sagrada (Ext.), 2 gr.	2/-	5 gr	Phosphorus, $\frac{1}{80}$ Ext. Nuc.		
Ergotin. Comp.			Vom., $\frac{1}{4}$ gr.	2/-	
R. Ergotin, 1 gr.; Ferri Sulph.		Ferri Quinina et Strych-	Podophyllin Resin, $\frac{1}{8}$ gr.; Pil.		
Exsic., 1 gr.; Ext. Hellebor.,		nina Phosph. (Wyleys'), re-	Rhei Co., 4 gr.	2/6	
1 gr.; Ol. Sabinæ $\frac{1}{2}$ m.; Ext.		presenting Easton's Syrup ...	Potass. Permang., 1 gr., 2 gr.	2/-	
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Sole Makers in England of Cold-drawn African Ground Nut Oil.

WM. BUSH, SON & CO.

YORK STREET, WALWORTH, LONDON, S.E. Established over 40 Years.

Wholesale and Export Chemists. Manufacturers of Concentrated Fruit Essences and Flavourings of every description. Colour Extracts for Confectionery. Citrate of Magnesia, &c. Importers of Finest Super Essence of Lemon and all Essential Oils, &c.

PRICE LIST AND SAMPLES ON APPLICATION. TELEGRAPHIC ADDRESS—"BUSHWORTH LONDON."

DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS

BARRON, SQUIRE & CO.

(LATE DREW, BARRON, & CO.),

WHOLESALE & EXPORT DRUGGISTS,
BUSH LANE, LONDON, E.C.,

MANUFACTURERS OF ALL DESCRIPTIONS OF PHARMACEUTICAL PREPARATIONS,

Beg to inform Merchants, Shippers, &c., that all Indents entrusted to them will receive careful attention and prompt execution.

Messrs. B., S. & Co. request the attention of their friends and the Trade, at home and abroad, to their having PURCHASED THE BUSINESS of Messrs. JAMES BASS & SONS, Hatton Garden, and with it the various Formulæ from which their Special Preparations have been made, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

HOMŒOPATHIC MEDICINES

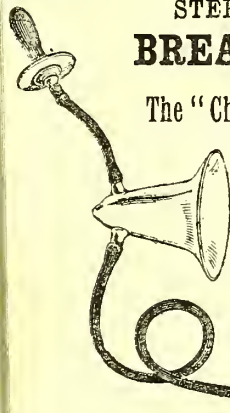
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	1s. SIZE.	6d. SIZE.	
Pilules	5/-	3/-	per dozen.
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Camphor Solution or Pilules ...	5/-	3/-	"
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SELECTIONS IN COUNTER SHOW CASES AT £2 12s., £3, £5 10s., £6 18s.

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HOMŒOPATHIC CHEMISTS
(FIRST ESTABLISHED),
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STERLING'S "COMBINATION"
BREAST EXHAUSTER,
AS SUGGESTED IN
The "Chemist & Druggist" on June 16th
(See page 781).



Packed in Cardboard Boxes
to retail at 1s. each.
Wholesale, 7s. per doz. net.

RAIMES & CO.
YORK.
RAIMES, CLARK & CO.
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The Mormon Elder's DAMIANA WAFERS

THE MOST POWERFUL
INVIGORANT
EVER PRODUCED.

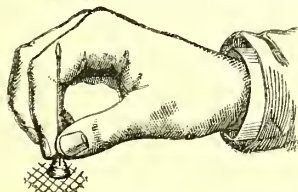
Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY and Nervous Debility. *Prompt, Safe, and Sure.* 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

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202 Grand Street, New York City;
London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son,
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all Wholesale Druggists.



Trade Mark.



Registered.

THE
ASSOCIATION for the SUPPLY of PUKE VACCINE LYMPH,
12 PAUL MALL EAST, LONDON, S.W.
SOLE AGENTS FOR DR. WARLWORTH'S CALF VACCINE.

ubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
UMAN VACCINE, from healthy children only, microscopically examined and
ce quoted. Tubes, two-thirds full, 1s. 6d. each; Tubes one-third full and Lancet-
red Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen Charged Small
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Physician, at the uniform fee of a guinea. P.O.O.'s (including postage, and crossed
London and Westminster Bank), with orders, payable to

EDWARD DARKE, Secretary.
Office hours, 10 to 4; Saturdays, 10 to 2.

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For TWENTY-FIVE YEARS has maintained
its world-wide reputation as

THE ONLY SAFE RELIABLE PHOS-
PHORIC REMEDY ever discovered for the
Permanent Cure of Brain Wreckage, Paralysis,
Sleeplessness, Harassing Dreams, Premature
Decay of Vital Power, and all Functional and
Diseased Conditions of the System dependent
upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart
Disease.
Cures Kidney and Liver Complaints.
Cures all Blood Disorders.
Cures Consumption and General De-
bility.

Checks all Wasting of the Vital Forces,
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THE EFFECT of this Standard Phosphoric
Remedy in Nervous Debility and its Kindred
Evils is Immediate and Permanent, all the
Miserable Feelings and Distressing Sym-
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REALLY MARVELLOUS.

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HEALTH, STRENGTH, AND ENERGY.

Is the only Medicine of the kind or name awarded a Certificate of Merit at the
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and from the highest Medical Authorities, prove conclusively the Verdict
Universal that in the World of scientific research no other Phosphoric Pre-
paration has received such exalted praise and distinguished recognition.

Full Printed Directions for the guidance of Patients in the Self-Treatment
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Sold in bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

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ADVANCE WITH THE TIMES!

Every Chemist should put up SYR. HYPOPHOSPH.
CO., and push it as the most modern form of
"Chemical Food" and "Quinine Tonic."

YEATMAN'S SYR. HYPOPHOSPH. COMP.

Is the STRONGEST and MOST ELEGANT Syrup
yet offered.

ONLY CHEMISTS ARE SUPPLIED.

It contains in each fluid drachm—

Hypophosphite of Lime	1 gr.
" " Soda	2 grs.
" " Potassa	1 gr.
" " Iron (Protoxide).....	1 gr.
" " Manganese.....	1/4 gr.
" " Quinine	1/4 gr.
" " Strychnine.....	1/100 gr.

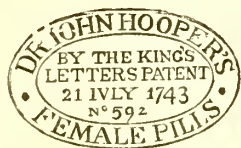
SLIGHTLY ALKALINE.

The composition may be varied to suit buyers. Diluted with
an equal bulk of Syrup it possesses the average strength of the
advertised Syrups. As HYPOPHOSPHITE, and NOT Pyro-
phosphate of Iron, is used in this preparation, no inelegant
precipitate occurs.

PRICES ON APPLICATION.

F. J. YEATMAN, M.P.S.
141 KENTISH TOWN ROAD, LONDON, N.W.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE
GENUINE



DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp.

Show Cards will be sent on application to

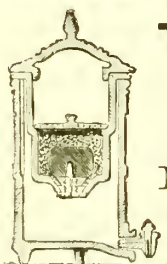
MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.
AMERICAN BUYERS are particularly Cautioned !!

Telegraphic Address—"FEEDING BOTTLES LONDON."

DOULTON & CO., LAMBETH, LONDON, S.E.

MANUFACTURERS OF EVERY DESCRIPTION OF

WATER FILTERS.



NEW PATENT

Manganous Carbon FILTERS.
Boudoir and Table FILTERS.
Pocket and Syphon FILTERS.

House Supply or Cistern FILTERS.
Patent Granular Charcoal FILTERS.
Refrigerator FILTERS.

MAIN SERVICE FILTERS

FOR INTERMITTENT OR CONSTANT SUPPLY.

See Reports, Analyses, &c. Detailed Lists on application.

To be obtained of all Dealers.



DOULTON & CO., LAMBETH, LONDON, S.E.

DEPOTS:—100 Soho Street, LIVERPOOL; Granville Wharf, BIRMINGHAM; and 6 Rue de Paradis, PARIS.

FURTHER IMPROVEMENTS IN

MAWSON'S FILTERS.

(BY ROYAL LETTERS PATENT.)

BEING constantly engaged in experiments on the filtration of water, MAWSON, SWAN & WEDDELL beg to announce that they have recently still further improved their Filtering Medium, without interfering in the slightest with its former proven qualities, or with the simplicity of its use.

The speed of filtration has also been rendered as nearly as possible uniform, in proportion to the surface of filtering medium. The taste formerly communicated to the water for the first few days of use has been removed.

ESTIMATES GIVEN FOR WATER ANALYSIS, CHEMICAL AND BACTERIOLOGICAL.

SOLE PROPRIETORS,

MAWSON, SWAN & WEDDELL,

20 WEST GRAINGER STREET, NEWCASTLE-ON-TYNE.

May be obtained from all "Sundry" Houses.

IMPORTANT.

ROYAL BALSAMIC PLAISTERS

PREPARED BY W. MATHER.

CAUTION TO THE TRADE.

The Commissioners of Inland Revenue having instituted Proceedings against several Chemists owing to certain Handbills accompanying the sale of Royal Balsamic Plaisters, such Handbills being regarded as asserting a Proprietary Right contrary to Act of Parliament, retailers are respectfully solicited to examine all packages of Plaisters they may have in stock, and

Destroy all Handbills Issued Prior to this Notice

that have reference to Royal Balsamic Plaisters. As all future Handbills will bear the date of issue at the bottom, it will be understood that all Handbills as have no date thereon must not be used. It is hoped that retailers will render assistance to prevent further proceedings by their compliance with the terms of this notice. It may be observed that the Stamp on the back of the Plaisters is in accordance with the Provisions of the Act of Parliament.

W. MATHER,
7, DRYER STREET, HULME, MANCHESTER, ENGLAND.

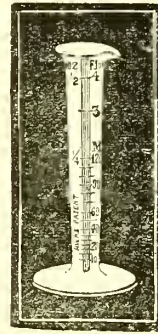
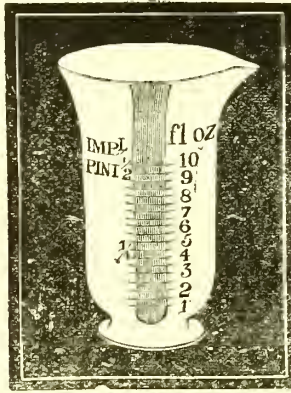
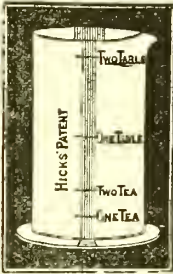
PRICE LISTS SENT ON APPLICATION.

London Wholesale and Export Agents: Messrs. MACE & HALDANE, 77 Milton Street, London, E.C.



AWARDED
GOLD MEDAL.

ENORMOUS SUCCESS!



I. I. EXHIBITION,
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WONDERFUL SALE
ALL OVER
THE WORLD.

NEW PATENT

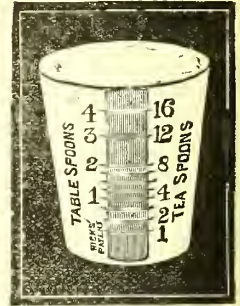
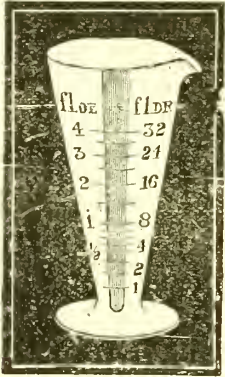
OPAQUE GLASS MEASURES

For Domestic, Chemists', and Photographers' Use.

The advantage of these Measures over those of Plain Glass consists in their being made of Pure White Enamel Tubing, with the divisions and figures fired on in indelible black. They can therefore be read with the greatest ease in any light.

SOLE MANUFACTURER:—

J. J. HICKS, 8, 9, and 10 HATTON GARDEN, LONDON.



To be obtained of all Wholesale Houses and Chemists. Price Lists on application

FLATNESS OF TASTE

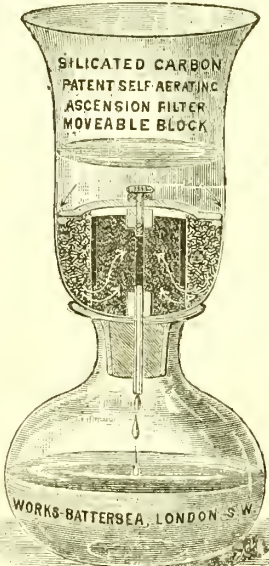
SO COMMON IN FILTERED WATER,

OBVIATED BY USING SILICATED CARBON FILTERS AERATED

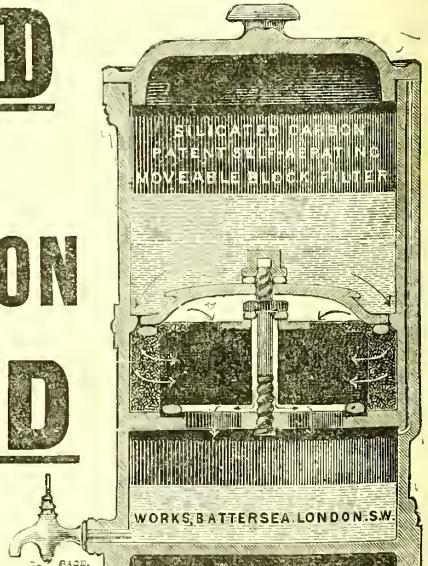
By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.

LIBERAL DISCOUNT TO THE TRADE.



Glass Table Filters.



Domestic Filters

LIBERAL DISCOUNT TO THE TRADE.

FOR PRICES AND FULL PARTICULARS, WRITE TO THE
SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.

BOTTLES

GLASSWARE, &c.

EVERY CLASS AND DESCRIPTION.

HOME, COLONIAL,

AND

FOREIGN BUYERS

SHOULD SEND FOR PRICE LISTS.

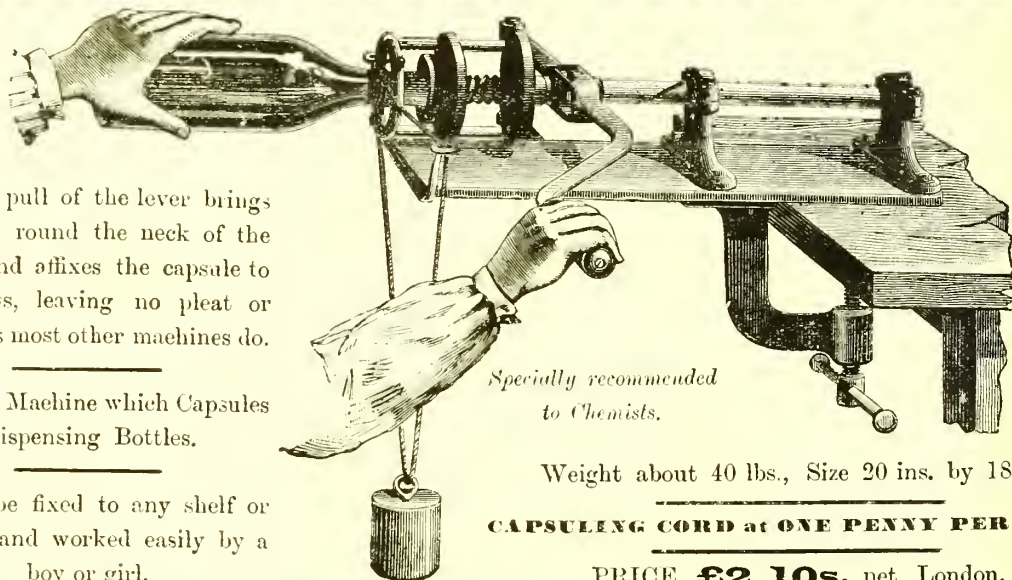
BREFFITS'

(LIMITED),

AIRE & CALDER BOTTLE CO.

83 UPPER THAMES ST., LONDON.

THE "SIMPLEX" (N.M. PATENT) CAPSULING MACHINE.



A single pull of the lever brings the eord round the neck of the bottle and affixes the capsule to the glass, leaving no pleat or crease, as most other machines do.

The only Machine which Capsules Dispensing Bottles.

It can be fixed to any shelf or counter and worked easily by a boy or girl.

*Specially recommended
to Chemists.*

Weight about 40 lbs., Size 20 ins. by 18 ins.

CAPSULING CORD at ONE PENNY PER YARD.

PRICE £2 10s. net, London.

C. MELIN, 37 CRUTCHED FRIARS, LONDON, E.C.

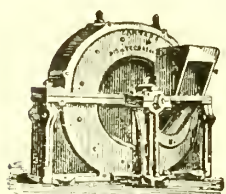
CARTER'S DISINTEGRATORS

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.

NEARLY 1,100 IN USE

IN ALL PARTS OF THE WORLD.

For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable. Made in 9 Sizes. Illustrated Catalogue may be obtained on application.



Samples of ANY Material will be Ground free of charge.

J. HARRISON CARTER, 82 MARK LANE, LONDON; and PARIS.

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THE "UNIVERSAL" KNEADING AND MIXING MACHINE FOR PILL MASS MAKING,

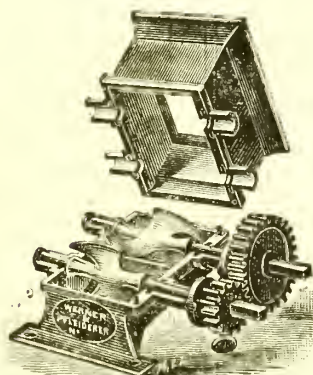
ALSO FOR

Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing and Incorporating.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

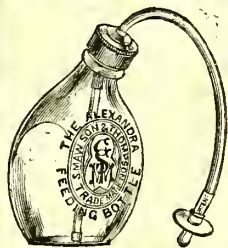
Made in various sizes, to do from $\frac{1}{2}$ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 88 Upper Ground St., LONDON, S.E.



Size 3, Type I, for 1-lb. Mass.

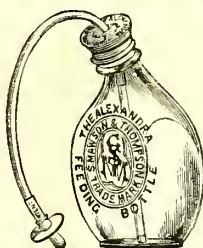
S. MAW, SON & THOMPSON'S FEEDING BOTTLES.



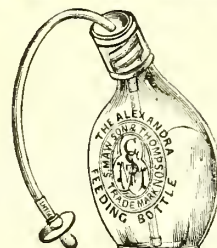
Alexandra Feeding Bottle,
Screw Metal or Earthenware Cap.
11/ per doz.



Alexandra Feeding Bottle,
Gilt Porcelain Cap.
20/ per doz.



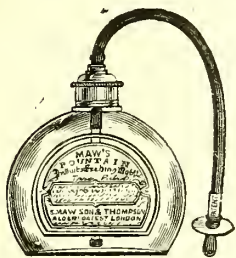
Alexandra Feeding Bottle,
Earthenware Cap.
11/ per doz.



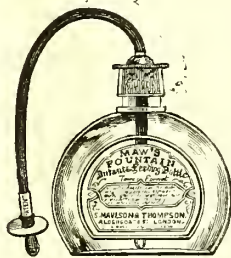
Alexandra Feeding Bottle,
Screw Glass or Earthenware.
Stopper, 11/ per doz.



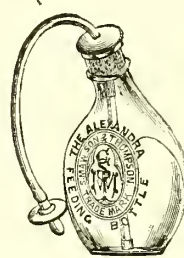
Alexandra Feeding Bottle,
Earthenware Cap.
8/ per doz.



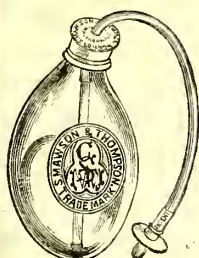
Fountain Feeding Bottle,
Screw Glass Stoppers.
20/ per doz.



Fountain Feeding Bottle,
Screw Glass Stoppers.
12/6 per doz.



Alexandra Feeding Bottle,
Wood-Top Cork.
3/ and 3/8 per doz.



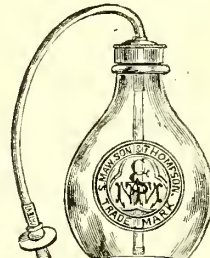
Oval Feeding Bottle,
Earthenware Cap.
8/ per doz.



Export Feeding Bottle,
Earthenware Cap.
7/3 per doz.



Export Feeding Bottle,
Screw Glass Stopper.
7/6 per doz.



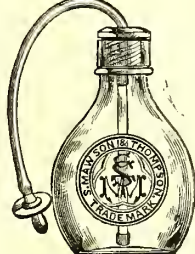
Export Feeding Bottle,
Screw Metal or Earthenware Cap.
9/ per doz.



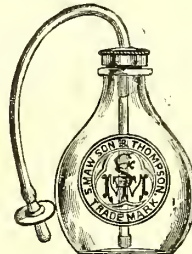
Export Feeding Bottle,
Metal Cap.
4/6 per doz.



Export Feeding Bottle,
Wood-Top Cork.
2/9 and 3/6 per doz.



Export Feeding Bottle,
Screw Glass Stopper.
4/ per doz.



Export Feeding Bottle,
Screw Metal Cap.
4/6 per doz.

OR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 46 AND 47.

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

S. MAW, SON & THOMPSON, LONDON.

NEVER FAILING! SELF ADJUSTING!! PATIENCE SAVING!!!

R. H. BARRETT'S NEW PATENT BOTTLE.

THE ONLY REALLY PERFECT CAPPED BOTTLE FOR VASELINE, POMADE, DRY POWDERS, &c.

Prices—Best Box-wood Caps, 2 oz. 20/-, 3 oz. 24/-, 4 oz. 28/- per gross.

*Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered. Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.***R. H. BARRETT,**FLINT GLASS BOTTLE WORKS,
THE OVAL, CAMBRIDGE HEATH, LONDON, E.

Telegraphic Address—"FOREFRONT LONDON."

[2]

BOORD & SON,
RECTIFYING DISTILLERS & WINE MERCHANTS,

ALLHALLOWS LANE

and

BARTHOLOMEW CLOSE, }

LONDON, E.C.,

OFFER LOWEST QUOTATIONS, ON APPLICATION, FOR

FINEST RECTIFIED SPIRITS OF WINEMethylated Spirit and Finish; Finest Orange Wine, Sherries,
and Malagas for Medicated Wines.**ANILINE DYES**

TO SUIT ALL TRADES.

BEST SPIRIT BLACK
IN THE MARKET.Mahogany Stain
Ebony Stain
Oak Stain
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Stain**PRONK, DAVIS & CO.**
3 TRINITY PLACE,
TOWER HILL, LONDON, E.C.COLOURS.
CHEMICALS.
INDIGO PASTE.**CUDBEAR**

DYEWOOD EXTRACTS.

BRONZE POWDERS AND METAL LEAF.

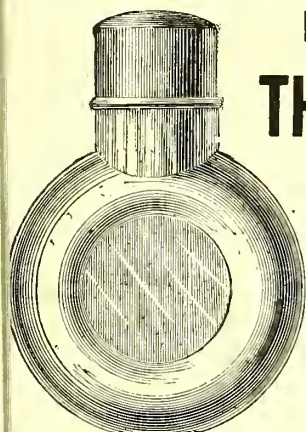
BURROUGHS
Best
Cale St.
Distillery.**Methylated**
CHELSEA,
S.W.**Spirits**
AT LOWEST PRICES.**Best****Miscible****Naphtha**
FINEST WOOD NAPHTHA.**JAMES BURROUGHS**
LONDON, S.W.**ROBERT GIBSON & SONS,**

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ERSKINE STREET, HULME, MANCHESTER, ENGLAND.
LONDON DEPOT—1 AUSTRALIAN AVENUE.



EXTRAORDINARY CHEAP LINE!!! THE WATCH SMELLING-SALT BOTTLE

PLAIN OR FLUTED.

These Bottles are fitted with BEST SCREW NICKEL CAPS, lined with Washers, and are the most wonderful value ever offered. A trial order will prove this fact.

PRICE, IN BEST WHITE FLINT OR ASSORTED COLOURS, **12/-** PER GROSS, in not less than 1 gr. lots.
SPECIAL QUOTATIONS for Orders of FIVE GROSS and upwards.

E. A. HEARN & CO., Manufacturers of Glass Bottles of every description,
381-3 KINGSLAND ROAD, LONDON, E.

The annexed Illustration shows exact size of above-mentioned Bottle.

DISPENSING BOTTLES & PHIALS

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

and 4 oz.	6/6 per gross.	12 oz.	11/6 per gross
and 8 oz.	7/6 "	16 oz.	15/6 "

WHITE MOULDED PHIALS.
LONG OR SQUAT SERIES.

oz.	3/0 per gross.	1½ oz.	4/3 per gross
oz.	3/6 "	2 oz.	4/9 "

Prompt attention to country orders. Packages 1/ each, allowed for if returned. Sample bottle sent free on application.

L. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,

25 Francis St., Tottenham Court Road, London, W.C.

established upwards of 70 years.

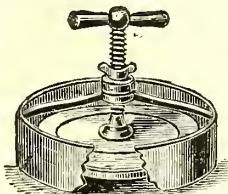
Bankers, London and Westminster

BRACHER'S "DESIDERATUM"
ADJUSTABLE

PILL FINISHER

(DELF'S PATENT).

"DESIDERATUM"
(TRADE MARK)
ON EVERY MACHINE.



PRICE 6/6 EACH.

WESTHILL, WINCANTON.

SHOWROOMS { London—100 Houndsditch. Manchester—24 Corporation Street. Wolverhampton—2 Cleveland Street.

For Descriptive Price Lists and Testimonials apply to

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Inventors and Patentees,

PATRONISED BY HER MAJESTY.

BARBER'S ORIGINAL CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles.

ALSO

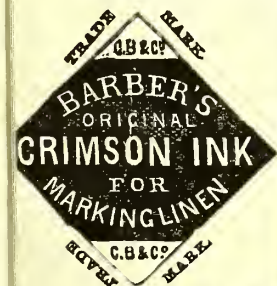
BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES, CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

MANUFACTURED ONLY BY THE PROPRIETORS—

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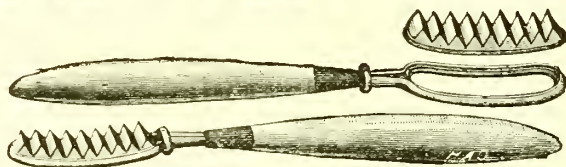
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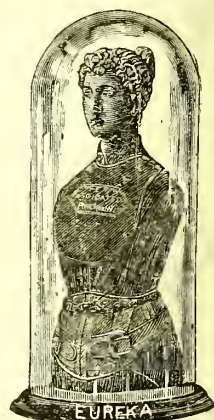
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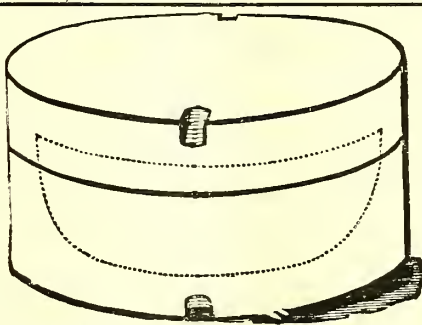
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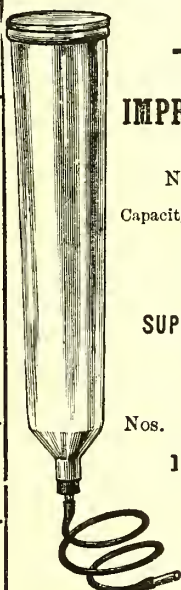
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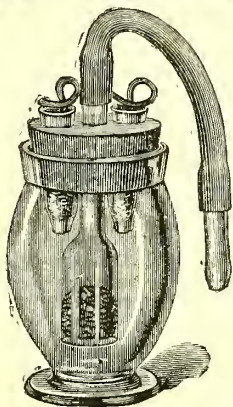
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The Chemist and Druggist of Australasia.

JUNE 1, 1888.

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Editorial Notes:—"Acetic Acid and the Sale of Poisons Act, N.S.W.," "Prescribing by Chemists," "Opium Smoking," "The Dental Act, Victoria."

COLONIAL REPORTS.

New South Wales.—Pharmacy Board: Official Report, and Correspondence.

New Zealand.—Pharmacy Board of New Zealand: Report of Meeting.

South Australia.—Report of Monthly Council Meeting.

Victoria.—Pharmacy Board of Victoria, and Pharmaceutical Society of Australasia: Reports of Meetings.

Letters from our own correspondents in Sydney, Auckland, Brisbane, Adelaide, Hobart, and Launceston.

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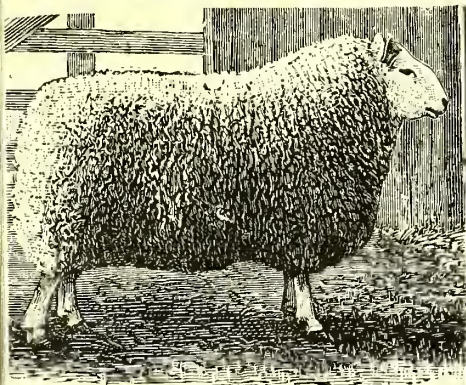
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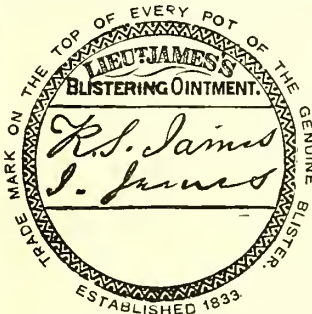
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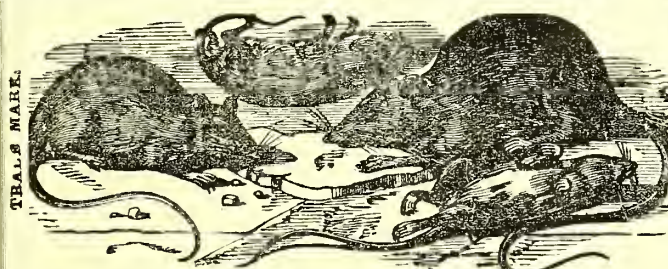
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Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export, as it will keep good in any climate. In casks, 13, 27, 56, 112, 140 gallons; small casks 3s. 9d. per gall., carriage allowed. In wine bottles (not less than 3 doz.), at 9s. per doz., including bottles. Cases extra and returnable.
 Sample six stamps. Special quotations to large buyers.

GEO. DURRANT & CO., Hertford.**AMBROSIA FOOD**FOR INVALIDS
MACLEAN'S

An EXQUISITE (PATENT) combination of MACLEAN'S REV-
 ALENTA FOOD, with Finest New (Special Preparation) OAT
 FARINA, in 2s. and 1s. packets.

MACLEAN, Food Specialist and Patentee, EDINBURGH.

Agents wanted in leading towns, home and abroad.

RUBBER TYPE

On Metal body, perfectly accurate, for instantly making a RUBBER STAMP for Special Labels, &c., saving expense and delay. Complete Outfits from 7/6. Send for Specimens and Price List to the Patentee,
E. M. RICHFORD, Dept. 44 Snow Hill, London,
 Manufacturer of Rubber Stamps, Presses, the "Nigropadd" and "Effective" Self-Inking Pads, &c., and Stamp-making Outfits.

Chemists in all parts of the world can and largely to their profits by pushing our Goods. Liberal terms.

HOOPING COUGH! HOOPING COUGH!! HOOPING COUGH!!!
 Positively and quickly cured by the New Discovery,

KEMP'S WHOOPALINE

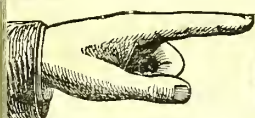
(TRADE MARK.)

Is a certain cure in all cases of Hooping Cough, Bronchial Disorders, and all affections of the Chest and Lungs. Price 1/1 and 2/6 per bottle.

Prepared only by

W. H. KEMP, 220 Holloway Road, LONDON.

Wholesale Agents—
Messrs. BURGYNNE, BURROUGHS & CO., 16 Coleman Street, London, E.C.



ARMBRECHT'S COCA WINE.

AGENTS APPOINTED.
DUKE ST., GROSVENOR SQUARE.

KERNICK'S LIME JUICE CORDIAL

(SWEET OR DRY),

FRUIT SYRUPS ETC.

LIST FREE.

KERNICK & SON, CARDIFF.

FRED^K FINK & CO.,

10 & 11 MINING LANE, LONDON, E.C.

SPECIALITIES: Glycerine—Gum Arabic—Gum
Tragacanth—Pure Beeswax—Honey—Vanilloes.

LINT. THE LIVERPOOL PATENT LINT CO.



MARK STREET MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.

See Advertisement.

S. SAINSBURY'S

A Highly-perfumed Scent,
prepared from the finest

ENGLISH LAVENDER,
thout any foreign whatever.

6 & 177 STRAND, LONDON.

Wholesale and Shipping terms on application.

Lavender Water.

TO LET.

AN OLD SAW WITH NEW TEETH.

SELL FLY CATCHERS WHILE THE FLIES ARE OUT!

If you would like a bit of roaring trade, tackle

WILSON'S STICKY FLY PAPERS,

As advertised in this journal. Their sale just now is fast and furious! Drop a card and you shall be fixed up sharp,
and we can square up at the end of the harvest. You pay only for what you sell.

THESE FLY PAPERS WILL FETCH 'EM! CATCH 'EM!! AND KEEP 'EM!!!

SINGLETON'S



250 YEARS'



WORLD-WIDE

BY FAR THE BEST
KNOWN REMEDY

GOLDEN EYE REPUTATION

FOR ALL DISORDERS OF THE
EYES AND EYELIDS.

OINTMENT REG^D

Recommended and frequently used by DR. WARE, DR. ALEXANDER, MR. CRITCHETT, and other Eminent Oculists

CAUTION.—None offered for Sale can be genuine unless the words SINGLETON'S GOLDEN EYE OINTMENT are engraved on the Government
Stamp and round the Pot, and the Bill of Directions in which it is enclosed bears the name and address—

STEPHEN GREEN, 210 Lambeth Road, LONDON, S.E.

VALUABLE & INTERESTING TO EVERYBODY. COMPRESSED HOPS.

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each.
These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a con-
siderable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING
and numerous other purposes. Full particulars given on each packet.

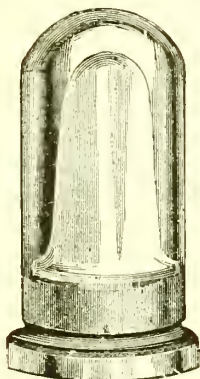
P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

Specially Packed by **A. WILKINSON & SONS, 27 Derby Lane, Old Swan, LIVERPOOL.**

SAMPLES AND QUOTATIONS ON APPLICATION.

Sole Agents for Chemists—EVANS, SONS & CO., Liverpool; EVANS, LESCHER & WEBB,
London; EVANS, SONS & MASON, Lim., Montreal.

SHIRLEY'S A1 BRAND MENTHOL.



QUITE NEW.

The Menthol is fixed on a China Stopper, which is covered with a glass shade; always clean.

Buyer's own name printed round the China if order is given for a large quantity.

Doz. A Dummy Cone, 9 inches high, given free with all orders of 20s., or two if 30s. order is placed.

GOOD SELLING PATTERNS.

No.	Description.	Price per doz
1	6d. Glass Bottles with Metal Screw Cap	3 3
1B	6d. Blue Ditto Ditto Ditto	3 4
9A	1s. or 1/6 Boxwood, Skittle-shaped	7 6
9c	1/6 or 2s. Do. Do.	9 6
9s	6d. or 9d., good value, Do.	4 0
17L	1s. Draughtsman Shape, Boxwood only, extra large	6 6
17s	6d. Ditto Boxwood	4 0
19	6d. Boxwood, Egg Shape, on elegant Card	3 0
21A	1s. Menthol on Boxwood stopper, covered with glass shade, very attractive, 12 in a box	6 3
23A	6d. Ditto Ditto 12 in a box	3 6
24	6d. Boxwood, Bottle Shape, very attractive	3 6

BOUND TO SELL.

Menthol in Boxwood, with views of London on one side of the case, beautifully painted—St. Paul's Cathedral, Westminster Abbey, Windsor Castle, Tower of London, Westminster Bridge, Houses of Parliament. This is

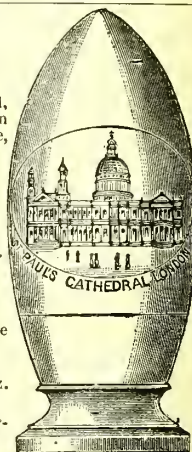
A NOVELTY

and adds greatly to the value.

No extra is charged. 11A. 6d. ... 3/6 per doz.

14A. 1s. ... 6/3

Please state Views required when ordering.



SPECIAL PRICES to LARGE BUYERS.

Chemist's own name printed on back of the boxes without extra charge, provided a gross is ordered. This opportunity of advertising yourself and increasing your trade should not be lost.

ORDER AS A1 BRAND.

SHIRLEY'S 2nd QUALITY, PUT UP FOR THOSE WHO WANT CHEAP GOODS.

	No.	Per Dozen	Per Gross		No.	Per Dozen	Per Gross
2d.	100.—Polished Willow Box	1/5	13/	4d.	103.—Boxwood Pedestal (large)	2/9	27/
3d.	101.—Willow Acorn	1/10	17/	4d.	104.—" Barrel shape	2/9	27/
3½d.	102.—Boxwood Pedestal	2/4	24/	6d.	105.—" Button shape	3/4	34/

These prices are net, and the boxes have not the printed directions on them.

DON'T MAKE A MISTAKE!!!

The following Sell Well and bear a Good Profit:—

EAU DE COLOGNE

In flat watch-shape Bottles, with Nickel Cap.

Each Bottle is neatly labelled, and contains an ounce of best quality Perfume.

A GOOD SELLING LINE.

4s. per doz., 12 in a Box.

FULLER'S EARTH

Attractively put up in cardboard boxes, with label (3 colours).

Can be had either White Precipitated, as preferred by many, or ordinary Prepared Fuller's earth.

Price, 3s. per dozen.

Special terms for large quantities.

Order as A1 Brand.

TOOTH SOAP,

WHITE ROSE.

Nicely got up in a hinged patent Box (Jahneke's), neatly labelled.

The Soap itself is highly scented and fragrant.

4s. per dozen.

FUMIGATING RIBBON.

Elegantly put up in round blue and gold Boxes.

Indispensable to the Sick Room, as, after being lit a few minutes, a vapour ascends perfuming the whole room.

3s. 6d. per dozen.

A Show Stand given away with an order for 3 dozen, together with two yards of Ribbon to practically show its perfume.

SMELLING SALTS,

The best Bottle of the Season: it has a good base, and stands well: is attractively labelled, and enclosed in a hinged outer. Filled with strongest ammonia, and agreeably perfumed.

Price, 2s. per dozen, 20s. per gross.

Special quotations for 5 or 10 gross lots.

A similar Bottle, only stoppered, 4s. per dozen—43s. per gross.



A CHARMING LITTLE NOVELTY!

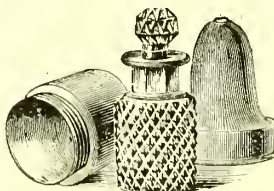
An elaborately Cut Glass Bottle, enclosed in a Pocketable Case.

JUST THE THING FOR THE LADIES!

Specifically adapted for Perfumes, Aromatic Vinegar, &c.

In Boxwood Case, with Screw Lid, 8/- per dozen; in Screamer Case, with Pull-off Lid, 6/9 per dozen.

If 6 dozen Boxwood Cased ones are ordered, Chemists' own name printed on each, free of charge.



ARTHUR W. SHIRLEY, 30 Paternoster Square, LONDON, E.C.

SEABURY PHARMACAL LABORATORIES,

NEW YORK AND LONDON.

MESSRS. SEABURY & JOHNSON wish to acknowledge the courteous assistance of their friends Messrs. HAWKES, SOMERVILLE & Co., in affording them temporary facilities to execute orders during the removal of their stock.

S. & J. beg to advise the Trade that they are now in a position to execute orders, and all communications should be addressed to **SEABURY & JOHNSON, 47 Farringdon Street, London, E.C.**

S. & J. Specialities may be obtained from all the leading Wholesale Druggists, Druggists' Sundrymen, and Patent Medicine Houses.

Indentors, to prevent disappointment, should specify that the goods are to be of
SEABURY & JOHNSON'S manufacture.

SULPHATE OF QUININE

(GOLD AND SILVER BRAND)

QUININE FACTORY AUERBACH

(DR. SEYFERTH).

Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

DEUTSCHE GOLD AND SILBER SCHEIDE ANSTALT

(VORMALS ROSSLER),

FRANKFORT-ON-MAINE.

CYANIDE OF POTASSIUM,
IODIDE OF POTASSIUM,
BROMIDE OF POTASSIUM,
NITRATE OF SILVER,
CHLORIDE OF GOLD,
SULPHOCYANIDE OF BARIUM,
IRON Reduced by HYDROGEN,
TARTARIC ACID,
HYDROCHINON,
STRONTIA,
MAGNESIA, and ALL OTHER
CHEMICALS for
PHOTOGRAPHIC and PHARMACEUTICAL PURPOSES, of the
Best Quality.

Sole Agents—OSCAR ANDREAE & CO.

26 Great Tower Street, LONDON, E.C.

REPORT

ON

COLEMAN'S LIEBIG'S EXTRACT

OF

MEAT AND MALT WINE,

By **FRANCIS SUTTON, Esq., F.C.S.,**

Public Analyst for the County of Norfolk, &c.

FRANCIS SUTTON, ESQ., F.C.S.,

Analytical and Consulting Chemist,
Author of Handbook of Volumetric Analysis,
Chemist to the Norfolk Chamber of Agriculture,
Gas Examiner for the City of Norwich.

NORFOLK COUNTY ANALYSTS'

OFFICE,

LONDON STREET, NORWICH,

July 25th, 1888.

I hereby certify that I have made an exhaustive analysis of the Meat and Malt Wine prepared by Messrs. Coleman & Co., Limited, Norwich, with a view to determine chiefly whether it really contains an appreciable quantity of Meat Extract, and whether it is entitled to be classed as a suitable dietetic stimulant for invalids. The result of my analysis proves that it does contain a suitable proportion of all the most valuable principles contained in Liebig's Extract of Meat. It is well known to physiologists that this extract is not valued for the ordinary albumenoids (such as gelatine and albumen), which are, indeed, excluded to a large extent by the process of manufacture, but that its chief value, as shown by Baron Liebig himself, consists in its containing these essential principles peculiar to flesh, and which have a remarkable restorative power over the nervous system of invalids, thus rendering Liebig's Extract famous. In addition to these valuable substances the wine also contains a considerable quantity of Malt Extract, which is also well known and appreciated as an excellent restorative in cases of debility.

In addition to this the wine is of pure, natural quality, free from sophistication.

As witness my hand,

(Signed)

FRANCIS SUTTON,

Public Analyst for the County of Norfolk, &c.

"KAMPHORKALK"

A fresh Disinfecting Powder. It is a combination of soluble Chlorides and Camphor.

THE ADVANTAGES CLAIMED FOR IT ARE—

It is free from Poison. It is free from Smell (except a slight odour of Camphor). It is Soluble in Water. It is White in Colour. It is not injurious to any fabrics. It is Effectual and Cheap.

EXTRACTS FROM REPORTS.

Professor WANKLYN says:—"It is a most powerful disinfectant."

Professor REDWOOD says:—"I have made several experiments for the purpose of testing the efficacy of 'Kamphorkalk' (Cooper's Camphorated Disinfectant), and am satisfied that it possesses the properties claimed for it, and that it may with advantage be used in cases where infective disease prevails; and for arresting the decay of animal or vegetable matter from which noxious effluvia may emanate."

Sold retail in pretty decorated Canisters, 2 lbs., 1/; 6 lbs., 2/ each. In 28-lb. Kegs and 1-cwt. Casks much cheaper in proportion.

Special Wholesale Agents—Messrs. Sanger & Sons, 489 Oxford Street, London.

Proprietor and Manufacturer—**ALFRED HORNBY, RICHMOND, SURREY.**

A Magnificent Show-Card, "BUBBLES"

By Sir JOHN E. MILLAIS, Bart., R.A.

WILL SHORTLY BE ISSUED BY MESSRS.

PEARS

Who have spared no pains or expense to make this subject worthy the acceptance of the Trade, and superior to any Show Card yet produced.

£20,000

have already been spent upon it. It will be a facsimile of the original painting (the *chef-d'œuvre* of

The Most Eminent English Artist

SIR J. E. MILLAIS, BART., R.A., purchased by Messrs. PEARS for £2,200), from which original each copy will *scarcely be distinguishable*.

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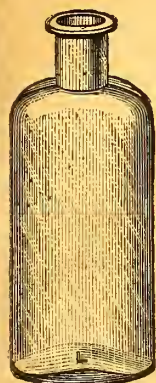
LONDON: 71-75, New Oxford Street, W.C., LONDON.

NEW YORK: 365 and 367, Canal Street, NEW YORK,

MELBOURNE: 132, Collins Street West, MELBOURNE.



DISPENSING BOTTLES



QUININE TINTED.

"L" BRAND.

Warranted Finest Quality Metal, Good Mouths, and Correct Measure.



CATALOGUE No. 42a. In any quantity from Stock.

FLATS OR OVALS.

Size ... 1 oz. 1½ oz. 2 oz. 3 oz. 4 oz. 6 oz. 8 oz. 10 oz. 12 oz. 16 oz. 20 oz. 24 oz. 32 oz. 40 oz.
 Per Gross 9/- 9/6 10/- 10/6 10/6 11/6 11/6 16/- 17/- 21/- 25/- 27/6 36/- 40/-

Discount: 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

IN ORIGINAL PACKAGES DIRECT FROM WORKS.

Carriage paid to Bristol, Glasgow, Liverpool, or London.

"L" BRAND. CATALOGUE No. 42a.

Size ... 1 oz. 1½ oz. 2 oz. 3 oz. 4 oz. 6 oz. 8 oz. 10 oz. 12 oz. 16 oz. 20 oz. 24 oz. 32 oz. 40 oz.
 Per Gross 7/6 8/- 8/- 8/6 8/6 9/6 9/6 12/6 13/6 16/6 20/- 22/- 29/- 33/-

BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size ... ½ oz. 1 oz. 1½ oz. 2 oz. 3 oz. 4 oz. 6 oz. 8 oz. 10 oz. 12 oz. 16 oz. 20 oz. 24 oz. 32 oz. 40 oz.
 Per Gross 6/- 6/- 6/- 6/- 6/8 6/8 7/9 7/9 10/6 11/6 15/- 19/- 22/- 27/6 32/-

STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

LYNCH & CO., ALDERSGATE STREET, **LONDON, E.C.**
 AND
 48 QUEEN STREET, MELBOURNE.

SOLE IMPORTERS

OF

APOLLINARIS WATER,
FRIEDRICHSHALL WATER,
HUNYADI JÁNOS WATER,

THE APOLLINARIS CO., LIM.

19 REGENT STREET, LONDON, S.W.

SPECIAL PRICES ON APPLICATION.

Cadbury's Cocoa IS SOLUBLE
and ABSOLUTELY PURE. ABSOLUTELY PURE.

DO NOT LET YOUR CHILD DIE!

Fennings' Children's Powders Prevent Convulsions; are Cooling and Soothing.

FENNINGS' CHILDREN'S POWDERS,

For Children Cutting their Teeth, to Prevent Convulsions.

Sold in Stamped Boxes, at 1s. 1½d. and 2s. 9d. (great saving), with full Directions.

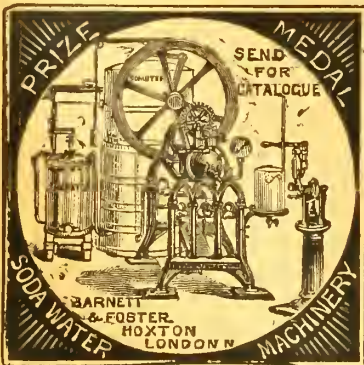
Do not contain Calomel, Opium, Morphia, nor anything injurious to a tender babe.

Chemists, by applying to the Patent Medicine Houses and Wholesale Chemists, can obtain, free of any charge, a supply of "FENNINGS' EVERY MOTHER'S BOOK," for Counter distribution.

EASY
TEETHING.SAFE
TEETHING.

SODA WATER MACHINERY

And all Appliances for the Manufacture of all Aerated Drinks in the highest state of perfection.



PRIZE MEDALS—London, 1862, 1873, 1874; Paris, 1867, 1878; Vienna, Philadelphia, Cape, &c. HIGHEST AWARD—Sydney, 1879-80.

FIRST-CLASS CERTIFICATES & 4 PRIZE MEDALS, CALCUTTA, 1883-84.

THREE GOLD, TWO SILVER, & TWO BRONZE MEDALS, INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884. 5 FIRST ORDERS OF MERIT, ADELAIDE, 1887.

Our Machines are universally adopted throughout the world for the manufacture of all kinds of Aerated Drinks, whether in bottles, syphons, or counter fountains. There are in England alone over 2,000 factories where our Machinery is in use, besides many thousands in India and the Colonies. They are the simplest, safest, and cheapest for the purpose, and produce a highly-charged gaseous water free from metallic or foreign contamination. All our Machines have a Gasometer, and it forms a most important necessity where purity of product is required, as in this the gas is expanded and purified; it also removes the possibility of accidents by explosion, and avoids the necessity of complication—these we consider of greater importance than the saving of a few inches of floor space.

A complete Soda Water Plant, including Bottling Machine, for producing 100 dozen Lemonade, Ginger Beer, Ale, &c., per day, is supplied for £40.

ILLUSTRATED CATALOGUE FORWARDED FREE.

BARNETT & FOSTER,
26th Eagle Wharf Road, New North Road, London, N.

THE CHEMIST & DRUGGIST

SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, AUGUST 11, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 8 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & CO.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£1,650.—LONDON, W.—Very old-established Business, Dispensing and Retail, situate in main street; returns £1,650; large well-fitted shop and good stock; good roomy house, with private entrance; price £1,350.

2.—£4,000.—LONDON.—Wholesale and Retail Business of good class, very old established, and well known; returns at present at the rate of £4,000 yearly; rapidly increasing; large and convenient premises; every opportunity given for the fullest investigation; anyone with £2,000 cash will be treated with on receipt of reference.

3.—£2,000.—WHOLESALE PARTNERSHIP.—A vacancy offers for a Partner in very old-established well-known Wholesale Business; a gentleman who will not object to travel required; full investigation permitted; £2,000 to £3,000 required.

4.—£1,250.—LONDON.—Very old-established Family Retail and Dispensing Business; returns at present about £1,250 yearly, well-fitted shop and good stock; small premium and valuation only required.

5.—£700.—LONDON, N.E.—Handsome Pharmacy; Retail and Dispensing of good class; returns £700 yearly, with good profits; very good convenient house; price about £550 or offer.

6.—£600.—LONDON, N.W.—Large handsome double-fronted Pharmacy, with Post Office attached; returns nearly £600 yearly (increased); large house, garden, &c.; about £550 required.

7.—£600.—LONDON, W.C.—Dispensing and Retail for sale under exceptional circumstances; returns at present nearly £600 yearly; can be largely extended; good stock; well-fitted shop; rent low; offer noted.

8.—£1,700.—EASTERN COUNTY.—Mixed Retail Business; returns £1,700 yearly, with good profits; comfortable house, &c.; moderate rental; terms, small premium and valuation of stock and fixtures.

9.—£1,600.—SUSSEX.—Good town; old-established Family Business, held by vendor many years; returns at present about £1,600, with good profits; handsomely fitted shop and good stock; full particulars on application.

10.—£1,200.—HOME COUNTY.—First-class Dispensing Business, held by the present owner many years; returns about £1,200 yearly; net profits over £400; premises large and convenient; price about £1,100; full particulars on receipt of reference.

11.—£750.—SOUTH OF ENGLAND.—Fashionable and much desired locality; good-class business, held by vendor 18 years; returns average over £750, with good profits; full prices for everything; well fitted and attractive shop, and good stock; price £700.

12.—£750.—WORCESTERSHIRE.—Homoeopathic and Dispensing Business; established 7 years; returns nearly £750; good profits; house has 10 rooms with private entrance; full particulars on application; illness cause of sale; valuation of stock and fixtures only required.

13.—£664.—HERTFORDSHIRE.—Unopposed country Business, of good class; returns last year £664; well-fitted shop and good stock; house contains 8 rooms and shop; rent £28 yearly, on lease; price £350; part may remain; anyone with small capital will be treated with.

14.—£400.—ESSEX.—Good country market town; good-class Retail and Dispensing; returns nearly £400; good house, &c., attached; business is capable of great extension; price £220.

15.—£835.—KENT.—Good town; good Family Retail and Dispensing; returns average £835, with net profits of nearly £350; well-fitted attractive shop and good stock; convenient house; low rental; price £800.

16.—£600.—HANTS.—Retail and Prescribing Business; returns about £600, with good profits; house in good condition; rent £35 only; price £450; vendor held the business 10 years; trial allowed if wished.

17.—£1,200.—SOUTH AFRICA.

FOR DISPOSAL.—A good-paying Business, situate in a healthy locality, and having good improving trade; net profits about £100 per month; price required about £1,200. Full particulars on application. London references given and required.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co's direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

PARSON C. BAKER,

8 Stockbridge Terrace, Victoria Station, S.W.
25 Years' Experience Valuation for Probate, &c.

	DURHAM County Returns	£1,650.	Rent	£75.	Price	£1,000
1.	DURHAM County Returns	£1,650.				
2.	CHESHIRE	1,300.	"	55.	"	700
3.	LANCASHIRE ...	1,030.	"	87.	"	950
4.	SOUTH COAST...	1,000.	"	45.	"	750
5.	LIVERPOOL	850.	"	50.	"	700
6.	LONDON, S.W.	620.	"	60.	"	525
7.	CHESHIRE	525.	"	30.	"	350
8.	BIRMINGHAM ...	500.	"	40.	"	300
9.	CLAPHAM	400.	"	40.	"	200
10.	WEST BROMWICH	400.	"	50.	"	250
11.	GUERINSEY	385.	"	40.	"	300
12.	LONDON, W. ...	250.	"	20.	"	200
13.	LEYTONSTONE	240.	"	40.	"	225

Some of above, newly established, increasing rapidly.

TENDERS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

COLWYN BAY.—Re J. H. Holmes.—For immediate disposal, the stock-in-trade, fixtures, &c., of a Chemist and Druggist; the fixtures, which cost about £600, are very handsome, were made by Treble, of London, about four years ago, and are as good as new; the stock is also in good order; inspection may be made on the premises any time between the hours of 10 A.M. and 4 P.M., until Thursday, August 16, 1888, when the tenders will be received and opened at my office at 12 o'clock noon. Further particulars may be obtained on application to J. W. B. Brown, Unity Buildings, 14 Temple Street, Birmingham, Trustee.

TO BE LET OR SOLD.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

To Let, Two Shops and Offices in a good thoroughfare in Derby; one suitable for a Chemist and Druggist. Apply to John Wills, Victoria Chambers, Derby.

Shop, Wimbledon.—Double-fronted shop to let, suitable for a Chemist; commanding position in main road; good opening; rent moderate. Apply to E. C. Ackerman, House and Estate Agent, Wimbledon; apply for register.

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A RETAIL and Dispensing Business; handsome and well-fitted shop, good house and premises, at moderate rental; main business thoroughfare; £500; near Clapham Junction. K., 170 High Road, Chiswick.

KENT.—For immediate sale, owing to death of proprietor, a very genuine country Business; returns £700; net profits over £300; rent, taxes, &c., £25; price £600, or offer. Address, E. H., care of Mr. E. Bing, Chemist, Canterbury.

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BIRMINGHAM.—Chemist, Druggist, and Drysaltery Business for disposal; leading thoroughfare in populous district; established over 50 years; sales about £1,200; stock and fixtures £200, orat valuation. For further particulars apply to W. O. Hill, Chartered Accountant, 27 Bennett's Hill, Birmingham.

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LANCASHIRE.—An old-established good general mixed Business, well situated in the best part of a good town in the north-eastern division, to be disposed of only on account of ill-health; rent 45s.; returns, 1886, 840s.; in 1887, 946s.; price to an immediate cash purchaser, 600s. Apply to A. M. Hugill, care of R. Sunner & Co., Wholesale Druggists, Liverpool.

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WANTED, a Partner, able to travel, with £1,600 or £2,000, to take place of one deceased; old-established "Essence" business, and doing well. Apply, "Citrus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT wishes to enter a genuine established business, where the owner is wishing to retire, with a view to becoming a Partner in the business; has had long and varied experience and is capable of acting as manager; reference given. "Associate," care of Mr. Steeper Chemist, Swineshead, Boston.

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A SENIOR and two Junior Assistants required. Apply, by letter only, stating all particulars, to Hardy & Co., 42 Fenchurch Street.

QUALIFIED Assistant, as Manager of a Branch Business; in or outdoors; one with a knowledge of quick cash trade preferred. Matterson, Co-operative Chemist, 94 New Oxford Street, W.C.

AT once, an Assistant requiring time for study; one accustomed to cash trade preferred. Apply, personally if possible, to W. H. Hooper, 43 High Street, Peckham, S.E.

WANTED, Assistant to manage branch; light mixed business; one accustomed to seed trade preferred. Apply with full particulars, Furnival & Eardley, Chemists, Hauley.

WANTED, a Qualified Assistant for China. Address, stating age, previous engagements, and qualifications, to "China," care of Geo. Curling & Co., 30 St. Mary Axe, E.C.

IMMEDIATELY.—An Assistant, accustomed to a good-class country trade; apprentices kept. Apply, with carte-de-visite if convenient, to J. Meredith, Chemist and Wine Merchant, Brecon. Applications not replied to in three days declined.

BIRKENHEAD UNION.—Wanted, a Dispenser (Minor qualification), outdoors; salary £85. Send full particulars as to age, experience, &c., with testimonials, on or before Saturday, the 18th instant. John Carter, Clerk to the Guardians, 45 Hamilton Square, Birkenhead. August 7, 1888.

TRAVELLERS now calling on Mineral Water Matters in all parts of the United Kingdom can hear of good Commission from old-established Manufacturers of Essences; must be experienced. Address, 110/61, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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WANTED, a Junior Assistant for light retail and dispensing business. Apply, R. Hiscock, 17 Broad Gate, Coventry.

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Junior; aged 22; tall; outdoors; South Coast preferred; good references. G. M., St. Day, Cornwall.

IMPROVER; aged 17; 18 months' experience. "Chemist," 23 Broadgate, Coventry.

Junior; nearly 21; 3 years' London experience. "Chemicus," 1 Rose Villas, Stamford.

Junior; aged 22; outdoors preferred; 5 years' experience; good references. King, Perth Villa, Shirland Gardens, Maida Vale, W.

Assistant in Wholesale. Wet or Dry Counters; 7 years' Retail and Wholesale; aged 23. F. L., 4 Bellevue Place, Beeston Hill, Leeds.

IMMEDIATE; temporary or permanent; Minor; aged 29. 6 St. Stephen's Terrace, Lambeth.

Assistant; outdoors; good Counterman, Extract Teeth; salary 30s. B. B., 84 Praed Street, Paddington.

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Dispenser; qualified; whole or part time. "Chemicus," 23 Third Avenue, Queen's Park.

Surgeon's Dispenser; 6 years' experience; aged 21. "Dispenser," care of Dr. Talland, Newcastle.

Assistant; aged 24; outdoors preferred; good Prescriber and Extractor; temporary not objected to. F. Orange, 53 Somers Road, Southsea.

Junior or Branch Manager; single; good references; qualified; retail and dispensing experience. J. P., 155 St. Michael's Hill, Bristol.

Assistant or Manager for Branch; reference; can Dispense, Prescribe, Extract Teeth; not qualified; married; aged 30. Address, "Coventry," 129 Graham Street, Penrith.

RETAIL MANAGER or Assistant, in either Wholesale or Retail; qualified and experienced; at liberty; would not object to travel. "Bristol," 143 Campbell Road, Stoke-on-Trent.

Assistant, Branch Manager, or Surgeon's Dispenser; good prescriber; 13 years' experience; married; unquestionable references; aged; moderate salary. W. M., 20 Prince's Street, Landport, Hants.

OUT September 3, as Junior with time for study; aged 22; height 5 feet 6 inches; West of England preferred. Please state particulars to "Island House, Highbury."

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Dispenser to Medical Man or Institution; qualified; 13 years' experience; good references. "Statim," Brooklands, Fordwich, Kent.

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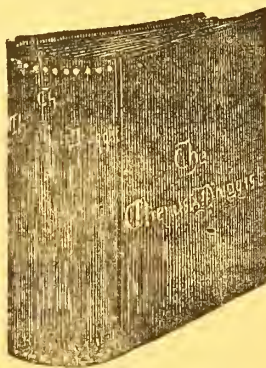
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